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INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME ALTERNATE MINIMUMS
ABERDEEN PROVING GROUND, MD

PHILLIPS AAF (KAPG) **NDB Rwy 22**
VOR Rwy 22
VOR/DME Rwy 22
RNAV (GPS) Rwy 22

NA when control tower closed.

ABINGDON, VA

VIRGINIA HIGHLANDS **LOC Rwy 24**
RNAV (GPS) Rwy 6
RNAV (GPS) Rwy 24
VOR/DME-B

NA when local weather not available.

Category C, 800-2½; Category D, 800-2½.

ANNAPOLIS, MD

LEE **RNAV (GPS)-A**

NA when local weather not available.

BALTIMORE, MD

BALTIMORE-WASHINGTON INTL
 THURGOOD MARSHALL **ILS or LOC Rwy 15L¹**
ILS or LOC Rwy 28²
VOR Rwy 10³

¹ILS, LOC, Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

²ILS, Categories A,B,C, 700-2; Category D 700-2¾; LOC, Category D, 800-2¾.

³Categories A,B,1100-2; Category C,D 1100-3.

MARTIN STATE **ILS or LOC Rwy 33¹²³**
LOC Rwy 15²
VOR/DME or TACAN Z Rwy 15⁴

¹ILS, Category D, 700-2.

²NA when control tower closed.

³NA when local weather not available.

⁴Categories A,B, 900-2; Category C, 900-2½; Category D 900-2¾.

BLACKSBURG, VA

VIRGINIA TECH/MONTGOMERY
 EXECUTIVE **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30

NA when local weather not available.

NAME ALTERNATE MINIMUMS
CHARLOTTESVILLE, VA

CHARLOTTESVILLE-
 ALBEMARLE **ILS or LOC Rwy 3¹²**
RNAV (GPS) Rwy 3³⁴
RNAV (GPS) Y Rwy 21³⁵
RNAV (GPS) Z Rwy 21³⁴

¹NA when control tower closed.

²ILS, Categories A,B, 800-2; Category C, 800-2¾; Category D, 1000-3. LOC, Category C, 800-2¾; Category D, 1000-3.

³NA when local weather not available.

⁴Category D, 1000-3.

⁵Category C, 800-2¾; Category D, 1000-3.

COLLEGE PARK, MD

COLLEGE PARK **RNAV (GPS) Rwy 15**
 NA when local weather not available.

CULPEPER, VA

CULPEPER RGNL **LOC Rwy 4¹**
RNAV (GPS) Rwy 4²
RNAV (GPS) Rwy 22²
VOR-A²

¹NA when FBO closed.

²NA when local weather not available.

DANVILLE, VA

DANVILLE RGNL **VOR Rwy 20**
 Category C, 800-2¾; Category D, 800-2½.

DUBLIN, VA

NEW RIVER VALLEY **VOR or GPS-A**
 Category D, 800-2¾.

EASTON, MD

EASTON/
 NEWNAM FIELD **ILS or LOC/DME Rwy 4¹**
RNAV (GPS) Rwy 4
RNAV (GPS) Rwy 15
RNAV (GPS) Rwy 22
RNAV (GPS) Rwy 33

NA when local weather not available.

¹ILS, LOC, NA when control tower closed.



ALTERNATE MINS

E3



10014

NAME ALTERNATE MINIMUMS
NEWPORT NEWS, VA
 NEWPORT NEWS/WILLIAMSBURG
 INTL ILS or LOC Rwy 7¹²
 ILS or LOC Rwy 25¹
 LOC/DME Rwy 20¹²
 RNAV (GPS) Rwy 7²
 RNAV (GPS) Rwy 20²

¹NA when control tower closed.
²NA when local weather not available.

OCEAN CITY, MD
 OCEAN CITY MUNI RNAV (GPS) Rwy 2¹
 RNAV (GPS) Rwy 32¹²
 VOR-A³

¹NA when local weather not available.
²Category D, 800-2¼.
³Categories A, B, 900-2; Category C, 900-2½;
 Category D, 900-2¾.

PETERSBURG, VA
 DINWIDDIE COUNTY RNAV (GPS) Rwy 5
 RNAV (GPS) Rwy 23
 VOR Rwy 23
 NA when local weather not available.

RICHLANDS, VA
 TAZEWEEL COUNTY LOC/DME Rwy 25
 RNAV (GPS) Rwy 25
 NA when local weather not available.

RICHMOND, VA
 RICHMOND INTL ILS or LOC Rwy 16
 ILS, Categories A,B, 900-2, Category C,
 900-2¾, Category D, 900-3.
 LOC, Categories A,B, 900-2, Category C,
 900-2¾, Category D, 900-3.

RICHMOND/ASHLAND, VA
 HANOVER
 COUNTY MUNI RNAV (GPS) Rwy 16
 VOR Rwy 16¹
 NA when local weather not available.
¹Category C, 800-2¼, Category D, 800-2½.

NAME ALTERNATE MINIMUMS
ROANOKE, VA
 ROANOKE RGNL/WOODRUM
 FIELD ILS or LOC Rwy 33¹²
 LDA Rwy 6²
 VOR/NDB Rwy 33³

¹ILS, Categories A,B, 800-2; Category C,
 800-2¼; Category D, 800-2½. LOC,
 Category C, 800-2¼; Category D, 800-2½.
²Categories A,B, 1600-2; Categories C,D,
 1600-3.
³Categories A,B, 1400-2; Categories C,D,
 1400-3.

SALISBURY, MD
 SALISBURY-OCEAN CITY
 WICOMICO RGNL ILS or LOC Rwy 32
 RNAV (GPS) Rwy 32
 VOR Rwy 33¹

NA when local weather not available.
¹Categories A, B, 1100-2; Categories C, D,
 1100-3.

**STAUNTON-WAYNESBORO-
 HARRISONBURG, VA**
 SHENANDOAH VALLEY
 RGNL ILS or LOC Rwy 5¹
 NDB Rwy 5
 RNAV (GPS) Rwy 5
 RNAV (GPS) Rwy 23

NA when local weather not available.
¹ILS, Category D, 700-2.

SUFFOLK, VA
 SUFFOLK EXECUTIVE RNAV (GPS) Rwy 4
 RNAV (GPS) Rwy 7
 NA when local weather not available.

WALLOPS ISLAND, VA
 WALLOPS FLIGHT
 FACILITY VOR/DME or TACAN Rwy 10
 Categories A,B, 900-2; Category C, 900-2½;
 Category D, 900-2¾.

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WASHINGTON, DC

WASHINGTON

DULLES INTL ILS or LOC/DME Rwy 1C¹
 ILS or LOC/DME Rwy 1L¹
 ILS or LOC/DME Rwy 12¹
 ILS or LOC/DME Rwy 19C¹
 ILS or LOC/DME Rwy 19R¹
 ILS or LOC Rwy 1R¹
 ILS or LOC Rwy 19L¹
 RNAV (GPS) Y Rwy 19R²

¹ILS, Categories A, B, C, D, 700-2.

²Category D, 800-2¼.

RONALD REAGAN

WASHINGTON NATIONAL ILS Rwy 1st
 LDA/DME Rwy 19th
 RNAV (GPS) RWY 33rd
 ROSSLYN LDA Rwy 19, 1100-3
 VOR/DME or GPS Rwy 15th
 VOR/DME or GPS Rwy 19th
 VOR Rwy 1st

¹ILS, Categories A, B,C, 700-2; Category D, 700-2¼. LOC, Category D, 800-2¼.

²Category D, 800-2 $\frac{1}{4}$.

³Categories A,B,C,D, 800-2½.

⁴Categories A,B, 1000-2;Category C, 1000-2¾; Category D, 1000-3.

⁵Categories A,B, 1000-2; Categories C,D, 1000-3.

WEST POINT, VA

MIDDLE

PENINSULA RGNL RNAV (GPS) Rwy 10
VOR-A

NA when local weather not available.

WILMINGTON, DE

NEW CASTLE ILS or LOC Rwy 1¹²
RNAV (GPS) Rwy 1²
RNAV (GPS) Rwy 9²
RNAV (GPS) Rwy 19²
RNAV (GPS) Rwy 27²
VOR Rwy 1²³
VOR Rwy 27³

¹NA when control tower closed.²NA when local weather not available.

³Category D, 800-2 $\frac{1}{4}$.

WINCHESTER, VA

WINCHESTER RGNL RNAV (GPS) Rwy 14
RNAV (GPS) Rwy 32
VOR/DME-A

NA when local weather not available.

WISE,VA

LONESOME PINE RNAV (GPS) Rwy 6¹²
RNAV (GPS) Rwy 24³

¹NA when local weather not available.

²Category D, 800-2 $\frac{1}{4}$.

³Category C, 800-2 $\frac{1}{4}$; Category D, 900-2 $\frac{3}{4}$.

14 JAN 2010 to 11 FEB 2010

INSTRUMENT APPROACH PROCEDURE CHARTS

I

FR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME	TAKE-OFF MINIMUMS	NAME	TAKE-OFF MINIMUMS
ABINGDON, VA		ANNAPOLIS, MD	
VIRGINIA HIGHLANDS		LEE	
TAKE-OFF MINIMUMS: Rwys 6, 24 , 300-1.		TAKE-OFF MINIMUMS: Rwy 30 , 300-1 or std. with a min. climb of 410' per NM to 400.	
DEPARTURE PROCEDURE: Climb straight ahead to 5000 when departing NE, or 4000 when departing SW, before proceeding on course.		DEPARTURE PROCEDURE: Rwy 12 , climb runway heading to 700 before proceeding on course.	
		Rwy 30 , climb runway heading to 1000 before proceeding right on course. Climb runway heading to 700 before proceeding left on course.	
ANDREWS AFB/NAF (KADW)		NOTE: Rwy 12 , cross departure end of runway at or above 35' AGL/66' MSL. Rwy 30 , trees, 1433' from departure end of runway, 85' left of centerline, 100' AGL/139' MSL. Cross departure end of runway at or above 35' AGL/66' MSL.	
CAMP SPRINGS, MD. 09127			
TAKE-OFF OBSTACLES: Rwy 1L , trees 2972' to 3085' from DER, 765' to 906' right of centerline, 93' AGL/355' MSL. Rwy 1R , trees 1512' from DER, 856' right of centerline, 74' AGL/336' MSL; trees 2254' from DER, 645' left of centerline, 93' AGL/355' MSL; trees 2629' from DER, 1095' left of centerline, 93' AGL/355' MSL; trees 2882' from DER, 364' left of centerline, 104' AGL/362' MSL. Rwy 19L , terrain 267' from DER, 580' left of centerline, 261' MSL; trees 2650' to 2874' from DER, 946' to 1113' right of centerline, 91' AGL/334' MSL.			
Rwy 19R , trees 2650' to 2873' from DER, 887' to 1054' left of centerline, 91' AGL/334' MSL; tower 4630' from DER, 1664' right of centerline, 108' AGL/377' MSL.			

BALTIMORE, MD**BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL**

TAKE-OFF MINIMUMS: **Rwy 4**, 300-1½ or std. w/ min. climb of 210' per NM to 500.

DEPARTURE PROCEDURE: **Rwy 4**, climb heading 044° to 800 before proceeding on course. **Rwy 28**, climb heading 285° to 900 before proceeding on course. **Rwy 33L**, climb heading 320° to 2000 before proceeding on course. **Rwy 33R**, climb heading 005° to 1900 before proceeding on course.

NOTE: **Rwy 4**, rod on lighted pole 1921' from departure end of runway, 329' right of centerline, 58' AGL/197' MSL. Light on pole 2177' from departure end of runway, 294' left of centerline, 58' AGL/197' MSL. Light on pole 1755' from departure end of runway, 482' right of centerline, 47' AGL/186' MSL. Tree 2370' from departure end of runway, 481' right of centerline, 60' AGL/199' MSL. Tank 6635' from departure end of runway, 2265' right of centerline, 122' AGL/316' MSL. Tank 7534' from departure end of runway, 2274' left of centerline, 173' AGL/338' MSL. **Rwy 10**, building 52' from departure end of runway, 319' left of centerline, 13' AGL/133' MSL. **Rwy 15L**, multiple trees beginning 648' from departure end of runway, 617' left of centerline, up to 68' AGL/167' MSL. Light on pole 921' from departure end of runway, 618' left of centerline, 62' AGL/161' MSL. **Rwy 15R**, multiple trees beginning 1144' from departure end of runway, 740' right of centerline, up to 53' AGL/172' MSL. **Rwy 22**, terrain beginning 111' from departure end of runway, 29' right of centerline, up to 171' AGL. Terrain 365' from departure end of runway, 137' left of centerline, 158' MSL. **Rwy 28**, tree 1392' from departure end of runway, 736' left of centerline, 77' AGL/176' MSL. **Rwy 33L**, building 4693' from departure end of runway, 874' right of centerline, 127' AGL/266' MSL. Tree 2250' from departure end of runway, 843' right of centerline, 66' AGL/205' MSL. Microwave antenna on building, 4725' from departure end of runway, 907' right of centerline, 126' AGL/265' MSL. Fence 203' from departure end of runway, 517' right of centerline, 9' AGL/140' MSL. **Rwy 33R**, numerous trees beginning 2925' from departure end of runway, 321' left of centerline, up to 70' AGL/289' MSL. Numerous trees beginning 975' from departure end of runway, 116' right of centerline, up to 63' AGL/262' MSL. Light on pole 2384' from departure end of runway, 837' right of centerline, 55' AGL/254' MSL. Building 998' from departure end of runway, 654' left of centerline, 24' AGL/183' MSL. Light on pole 3869' from departure end of runway, 603' left of centerline, 72' AGL/251' MSL. Light on pole 2736' from departure end of runway, 247' right of centerline, 17' AGL/216' MSL. Pole 3781' from departure end of runway, 370' right of centerline, 40' AGL/242' MSL. Signal 2453' from departure end of runway, 904' left of centerline, 45' AGL/204' MSL.

BALTIMORE, MD (CON'T)**MARTIN STATE**

TAKE-OFF MINIMUMS: **Rwy 15**, 800-2 or std. with a min. climb of 300' per NM to 1000. **Rwy 33**, 1300-2 or std. with a min. climb of 340' per NM to 1700'.

DEPARTURE PROCEDURE: **Rwy 15**, climb runway heading to 1000 before proceeding on course; or when directed by ATC, climbing right turn heading 190° to 1000 before proceeding on course.

NOTE: **Rwy 15**, trees 1960' from departure end of runway 684' left of centerline, 78' AGL/88' MSL, trees 3395' from departure end of runway, 585' left of centerline, 92' AGL/102' MSL. **Rwy 33**, pole 1553' from departure end of runway, across centerline, 68' AGL/90' MSL. Trees 2342' from departure end of runway, across centerline 86' AGL/108' MSL.

BLACKSBURG, VA**VIRGINIA TECH/MONTGOMERY EXECUTIVE (BCB)****AMDT 4 08073 (FAA)**

TAKE-OFF MINIMUMS: **Rwy 12**, 400-1¼ or std. w/ min. climb of 563' per NM to 2700.

DEPARTURE PROCEDURE: **Rwy 12**, climbing right turn direct PSK VORTAC to 3500 before proceeding on course. **Rwy 30**, climbing left turn direct PSK VORTAC to 4100 before proceeding on course.

NOTE: **Rwy 12**, bushes and trees beginning 275' from departure end of runway, 154' left of centerline, up to 100' AGL/2239' MSL. Trees beginning 5108' from departure end of runway, 1363' left of centerline, up to 100' AGL/2499' MSL. Trees beginning 3165' from departure end of runway, 1324' right of centerline up to 100' AGL/2279' MSL. **Rwy 30**, trees beginning 90' from departure end of runway, 461' left of centerline, up to 46' AGL/2140' MSL. Fence and obstruction light pole beginning 546' from departure end of runway, 161' left of centerline, up to 12' AGL/2139' MSL. Vehicle on road beginning 567' from departure end of runway, 310' left of centerline, 24' AGL/2137' MSL. Trees beginning 2080' from departure end of runway, 788' left of centerline, up to 100' AGL/2201' MSL. Fence, 861' from departure end of runway, 52' right of centerline, up to 12' AGL/2135' MSL. Trees beginning 539' from departure end of runway, 326' right of centerline, up to 40' AGL/2153' MSL. Trees beginning 1328' from departure end of runway, 117' right of centerline, up to 100' AGL/2182' MSL terrain beginning 330' from departure end of runway, 366' right of centerline, up to 2138' MSL pole and antenna beginning 1149' from departure end of runway, 391' right of centerline, up to 40' AGL/2151' MSL.



BLACKSTONE, VA

ALLEN C PERKINSON BLACKSTONE AAF

TAKE-OFF MINIMUMS: **Rwy 1**, 1000-2 or std. with a min. climb of 280' per NM to 1700. **Rwy 4**, 1000-2 or std. with a min. climb of 220' per NM to 1700. **Rwy 19**, NA.

DEPARTURE PROCEDURE: **Rwy 1**, climb heading 010° to 1700 before proceeding on course. **Rwy 4**, climb heading 039° to 1700 before proceeding on course.

Rwy 22, climb heading 208° to 900 before proceeding on course. **Rwy 22**, climb heading 208° to 900 before proceeding on course.

NOTE: **Rwy 4**, 50' AGL tree, 150' from departure end of runway, 450' right of centerline. **Rwy 22**, 66' AGL tree, 175' from departure end of runway, 450' left of centerline. Do not fly over ammunition dump 1.1 NM SW of Rwy 4.

BRIDGEWATER, VA

BRIDGEWATER AIRPARK

TAKE-OFF MINIMUMS: **Rwy 15**, 700-1. **Rwy 33**, 700-2.

DEPARTURE PROCEDURE: **All aircraft** climb in VBV holding pattern (SW, right turns, 035° inbound) to 4000 before proceeding on course.

BROOKNEAL, VA

BROOKNEAL/CAMPBELL COUNTY

NOTE: **Rwy 6**, multiple trees beginning 569' from departure end of runway, 252' right of centerline, up to 100' AGL/689' MSL. **Rwy 24**, multiple trees beginning 334' from departure end of runway, 286' right of centerline, up to 100' AGL/679' MSL. Multiple trees beginning 1377' from departure end of runway, 850' left of centerline, up to 100' AGL/719' MSL.

CAMBRIDGE, MD

CAMBRIDGE-DORCHESTER

TAKE-OFF MINIMUMS: **Rwy 34**, 300-1.

CAMP PEARY LNDG STRIP (KW94)

WILLIAMSBURG, VA 08213

TAKE-OFF OBSTACLES: **Rwy 5**: trees and multiple transmission lines 120' from DER, 184' left of centerline up to 95' AGL/126' MSL. Trees and multiple transmission lines 162' from DER, 257' right of centerline up to 100' AGL/132' MSL. **Rwy 23**: trees and multiple transmission lines 1891' from DER, 69' left of centerline up to 95' AGL/136' MSL. Multiple trees and transmission lines 537' from DER, 437' right of centerline up to 110' AGL/151' MSL.

CHARLOTTESVILLE, VA

CHARLOTTESVILLE-ALBEMARLE (CHO)

AMDT 9 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3**, std. w/ min. climb of 323' per NM to 1500, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 3**, climb via heading 030° to 1500 then climbing right turn to 4000 direct GVE VORTAC before proceeding on course, or for climb in visual conditions: cross Charlottesville-Albemarle airport at or above 2700 before proceeding on course.

Rwy 21, climb via heading 210° to 1400, then climbing left turn to 4000 direct GVE VORTAC before proceeding on course.

NOTE: **Rwy 3**, pole 97' from DER, 476' right of centerline, 27' AGL/627' MSL. Trees beginning 836' from DER, 597' right of centerline, up to 100' AGL/1216' MSL. Tower 2.3 NM from DER, 3443' right of centerline, 107' AGL/1167' MSL. Terrain beginning 2.2 NM from DER, 3183' right of centerline, up to 1116' MSL.

CHASE CITY, VA

CHASE CITY MUNI

NOTE: **Rwy 18**, trees beginning 191' from departure end of runway, 116' left of centerline, up to 100' AGL/609' MSL. Multiple trees beginning 327' from departure end of runway, 133' right of centerline, up to 100' AGL/599' MSL. **Rwy 36**, trees beginning 164' from departure end of runway, 154' right of centerline, up to 100' AGL/649' MSL. Trees beginning 470' from departure end of runway, 124' left of centerline, up to 100' AGL/649' MSL.

CHURCHVILLE, MD

HARFORD COUNTY

TAKE-OFF MINIMUMS: **Rwy 28**, 300-1 or std. with a min. climb of 400' per NM to 600.

NOTE: **Rwy 28**, 100' terrain/trees 1150' from departure end of runway.

CLARKSVILLE, VA

LAKE COUNTRY RGNL

TAKE-OFF MINIMUMS: **Rwy 4**, 600-1 or std. with a min. climb of 260' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 22**, climb runway heading to 1900 before turning.

CLINTON, MD

WASHINGTON EXECUTIVE/HYDE FIELD (W32)

ORIG 08045 (FAA)

NOTES: **Rwy 5**, Vehicle on road beginning 20' from departure end of runway, on centerline, up to 15' AGL/261' MSL. **Rwy 23**, Vehicle on road 23' from departure end of runway, 329' left of centerline, 15' AGL/260' MSL.

COLLEGE PARK, MD

COLLEGE PARK (CGS)

AMDT 3B 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 15**, 400-2½ or std. w/ min. climb of 486' per NM to 600. **Rwy 33**, 400-2½ or std. w/ min. climb of 433' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 15**, climb heading 149° to 600 before proceeding on course. **Rwy 33**, climb heading 329° to 600 before proceeding on course.

NOTE: **Rwy 15**, trees beginning 2799' from departure end of runway, 570' left of centerline, up to 100' AGL/259' MSL. Antenna 1.1 NM from departure end of runway, 149' left of centerline, 167' AGL/270' MSL. **Rwy 33**, terrain beginning 1 NM from departure end of runway, 3700' right of centerline to 3700' left of centerline, up to 439' MSL. Building 3811' from departure end of runway, 467' right of centerline, 184' AGL/254' MSL. Tower 1.9 NM from departure end of runway, 1447' left of centerline, 255' AGL/405' MSL.

CRISFIELD, MD

CRISFIELD MUNI

TAKE-OFF MINIMUMS: **Rwys 6, 24**, NA-obstacles

DEPARTURE PROCEDURE: **Rwy 14**, climb via heading 142° to 900 before proceeding on course.

Rwy 32, climb via heading 322° to 900 before proceeding on course.

CULPEPER, VA

CULPEPER RGNL (CJR)

ORIG 07354 (FAA)

DEPARTURE PROCEDURE: **Rwy 22**, climb heading 218° to 1000 before turning right.

NOTE: **Rwy 4**, tree 79' from departure end of runway, 418' left of centerline 86' AGL/337' MSL. Vehicle on road 207' from departure end of runway, 367' left of centerline, 15' AGL/330' MSL. Tree 3396' from departure end of runway, 514' right of centerline, 91' AGL/410' MSL. **Rwy 22**, tree 128' from departure end of runway, 332' left of centerline, 25' AGL/334' MSL. Multiple trees beginning 272' from departure end of runway, 179' right of centerline up to 22' AGL/341' MSL. Pole 1480' from departure end of runway, 68' left of centerline, 27' AGL/356' MSL.

CUMBERLAND, MD

GREATER CUMBERLAND RGNL

TAKE-OFF MINIMUMS: **Rwy 5**, 1700-2 or std. with a min. climb of 300' per NM to 3400. **Rwy 11**, 1600-2 or std. with a min. climb of 520' per NM to 3400. **Rwy 23**, 1200-2 or std. with a min. climb of 660' per NM to 3400. **Rwy 29**, NA.

DEPARTURE PROCEDURE: **Rwys 5, 11**, climb runway heading to 3400 before proceeding on course. **Rwy 23**, climbing left turn to intercept 177° course from CBE NDB to 3400 before proceeding on course.

DANVILLE, VA

DANVILLE RGNL

TAKE-OFF MINIMUMS: **Rwys 2, 31**, 300-1 or std. with a min. climb of 240' per NM to 1000.

DAVISON AAF (KDAA)

FORT BELVOIR, VA

.....Rwy 32, 300-1*

*Or standard with minimum climb of 380/NM to 500.

TAKE-OFF OBSTACLES: **Rwy 32**, 63' AGL tree 865' from departure end of rwy, 82' right of centerline.

DOVER AFB (KDOV)

DOVER, DE 09155

TAKE-OFF OBSTACLES: **Rwy 1**, possible aircraft/vehicles at DER hammerhead just left of rwy centerline, up to 65' AGL/91' MSL. **Rwy 19**, possible aircraft/vehicles at DER hammerhead just right of rwy centerline, up to 65' AGL/91' MSL. **Rwy 32**, multiple C-5s parked on ramp beginning 1535' thru 2780' from DER, 1010' left of centerline, up to 65' AGL/98' MSL. Bldg 3900' from DER, 760' left of centerline, 88' AGL/119' MSL. Possible taxiing aircraft/vehicles on taxiway Alpha beginning 565' thru 2780' from DER, 750' left of centerline, up to 65' AGL/98' MSL. Possible large aircraft 2800' from DER, on taxiway Golf just left of centerline, up to 65' AGL/92' MSL.

DOVER/CHESWOLD, DE

DELAWARE AIRPARK

NOTE: **Rwy 9**, multiple trees beginning 26' from departure end of runway, 50' left of centerline, up to 100' AGL/149' MSL. Pole line 1151' from departure end of runway, 36' right of centerline, 50' AGL/99' MSL. Multiple trees beginning 815' from departure end of runway, 505' right of centerline, up to 100' AGL/154' MSL. **Rwy 27**, multiple trees beginning 231' from departure end of runway, 85' left of centerline, up to 100' AGL/169' MSL. Multiple trees beginning 829' from departure end of runway, 43' right of centerline, up to 100' AGL/164' MSL.

DUBLIN, VA

NEW RIVER VALLEY (PSK)

AMDT 2 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 24**, 200-1½ or std. w/ min. climb of 310' per NM to 2400.

DEPARTURE PROCEDURE: **Rwy 6**, climbing right turn heading 150° to intercept PSK VORTAC R-120 outbound to 5200 before proceeding on course.

Rwy 24, climb heading 238° to 4000 before proceeding on course.

NOTE: **Rwy 6**, tree 321' from DER, 493' left of centerline, 100' AGL/2112' MSL. Terrain 122' from DER, 460' left of centerline, up to 2105' MSL. **Rwy 24**, pole 1223' from DER, 671' right of centerline, 42' AGL/2161' MSL. Pole 669' from DER, 558' right of centerline, 18' AGL/2137' MSL. Pole 4851' from DER, 1170' left of centerline, 32' AGL/2231' MSL. Tower 5078' from DER 1017' left of centerline, 101' AGL/2300' MSL. Trees 226' from DER, 271' left of centerline, up to 103' AGL/2302' MSL. Terrain 68' from DER, 281' right of centerline, up to 2116' MSL.

EASTON, MD**EASTON/NEWNAM FIELD**

TAKE-OFF MINIMUMS: **Rwy 22**, 300-2 or std. w/ climb of 241' per NM to 500.

NOTE: **Rwy 4**, vehicles on roads beginning 199' from departure end of runway, 350' right of centerline, up to 15' AGL/102' MSL. Multiple poles beginning 434' from departure end of runway, 88' right of centerline, up to 31' AGL/100' MSL. Multiple trees beginning 1485' from departure end of runway, 46' right of centerline, up to 64' AGL/133' MSL. Tree 1509' from departure end of runway, 38' left of centerline, 47' AGL/116' MSL.

Rwy 15, fence 2' from departure end of runway, 411' left of centerline, 8' AGL/57' MSL. Multiple poles beginning 721' from departure end of runway, 183' left of centerline, up to 64' AGL/123' MSL. Multiple poles beginning 828' from departure end of runway, 514' right of centerline, up to 26' AGL/85' MSL. Multiple trees beginning 862' from departure end of runway, 275' left of centerline, up to 89' AGL/148' MSL. Multiple trees beginning 1357' from departure end of runway, 238' right of centerline, up to 94' AGL/153' MSL. **Rwy 22**, tree 1251' from departure end of runway, 786' right of centerline, 56' AGL/95' MSL. Multiple trees beginning 1323' from departure end of runway, 759' left of centerline, up to 90' AGL/129' MSL. Tower 1.6 NM from departure end of runway, 2373' left of centerline, 276' AGL/291' MSL. **Rwy 33**, multiple trees 10' from departure end of runway, 19' right of centerline, up to 139' AGL/158' MSL. Vehicle on road 352' from departure end of runway, 405' right of centerline, 15' AGL/59' MSL. Pole 888' from departure end of runway, 409' left of centerline, 19' AGL/58' MSL. Multiple trees beginning 1153' from departure end of runway, 245' left of centerline, up to 99' AGL/118' MSL.

ELKTON, MD**CECIL COUNTY**

TAKE-OFF MINIMUMS: NOTE: **Rwy 13**, cross departure end of runway at or above 27' AGL/89' MSL. **Rwy 31**, 300-1½ or std. w/ min. climb of 290' per NM to 400.

DEPARTURE PROCEDURE: **Rwy 31**, climb heading 308° to 900 before turning left.

NOTE: **Rwy 13**, trees 185' from departure end of runway, 110' right of centerline, 50' AGL/113' MSL. Trees 325' from departure end of runway, 125' left of centerline, 75' AGL/138' MSL. **Rwy 31**, trees, 1350' from departure end of runway, on centerline, 115' AGL/221' MSL. Trees beginning 1050' from departure end of runway, 781' left to 781' right of centerline, up to 100' AGL/309' MSL.

EMPORIA, VA**EMPORIA-GREENSVILLE RGNL (EMV)****ORIG 09155 (FAA)**

NOTE: **Rwy 15**, vehicle on roadway 21' from DER, 291' left of centerline, up to 15' AGL/124' MSL. Trees beginning 56' from DER, 245' right of centerline, up to 60' AGL/169' MSL. Trees beginning 98' from DER, 231' left of centerline, up to 60' AGL/169' MSL. Trees beginning 1387' from DER, 387' left of centerline, up to 60' AGL/149' MSL. **Rwy 33**, trees beginning 115' from DER, 276' right of centerline, up to 60' AGL/189' MSL. Trees beginning 138' from DER, 321' left of centerline, up to 60' AGL/189' MSL. Vehicle on roadway, 163' from DER, 524' right of centerline, up to 15' AGL/144' MSL. Vehicle on roadway, 222' from DER, 534' left of centerline, up to 17' AGL/146' MSL.

FARMVILLE, VA**FARMVILLE RGNL (FVX)****ORIG 07354 (FAA)**

NOTE: **Rwy 3**, tree 1335' from departure end of runway, 277' right of centerline, 59' AGL/476' MSL. **Rwy 21**, vehicle on road 18' from departure end of runway, 495' left of centerline, 15' AGL/425' MSL. Tree 675' from departure end of runway, 315' right of centerline, 42' AGL/452' MSL.

FELKER AAF (KFAF),**FORT EUSTIS, VA 08297**

Rwy 14, 32 standard.

TAKE-OFF OBSTACLES: **Rwy 14**: Tree 3133' from DER, 167' left of centerline, 103' AGL/112' MSL. **Rwy 32**: Crane 2938' from DER, 941' left of centerline, 114' AGL/124' MSL. Trees beginning 2931' from DER, 186' left of centerline up to 74' AGL/85' MSL.

FORT MEADE (ODENTON), MD**TIPTON**

NOTE: **Rwy 10**, cross departure end of runway at or above 17' AGL/167' MSL. **Rwy 10**, trees 1052' right of departure end of runway, 88' AGL/238' MSL.

FRANKLIN, VA**FRANKLIN MUNI-JOHN BEVERLY ROSE****(FKN)****AMD 2 09071 (FAA)**

NOTE: **Rwy 9**, trees beginning 1977' from DER, 349' left of centerline, up to 100' AGL/139' MSL. Trees beginning 1287' from DER, 236' right of centerline, up to 100' AGL/134' MSL. Vehicle on road 533' from DER, 604' right of centerline, 15' AGL/59' MSL. **Rwy 27**, trees beginning 100' from DER, 444' left of centerline, up to 100' AGL/134' MSL. Trees beginning 520' from DER, 520' right of centerline, up to 100' AGL/134' MSL. Vehicle on road 308' from DER, left to right of centerline, 15' AGL/44' MSL.

FREDERICK, MD**FREDERICK MUNI**

TAKE-OFF MINIMUMS: **Rwy 12**, 500-3 or std. with a min. climb of 270' per NM to 1000.

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb runway heading to 2000 before proceeding on course. **Rwy 30**, climbing right turn to intercept FDK VOR R-010 to 2400 before proceeding on course.

FREDERICKSBURG, VA**SHANNON**

TAKE-OFF MINIMUMS: **Rwy 24**, 800-3 or std. with a min. climb of 290' per NM to 800.

DEPARTURE PROCEDURE: **Rwy 24**, climb to 800 via runway heading before proceeding on course.

NOTE: 744' tower 2.1 NM from departure end of Rwy 24.

FRIENDLY, MD**POTOMAC AIRFIELD**

TAKE-OFF MINIMUMS: **Rwys 6, 24**, 300-1.

NOTE: **Rwy 6**, 50' AGL trees 300' left of departure end of runway. 75' AGL trees 320' right of departure end of runway. **Rwy 24**, 80' AGL trees 200' right of departure end of runway. 75' AGL trees 200' left of departure end of runway. 30' AGL hanger 200' from departure end of runway, 190' right of centerline.

FRONT ROYAL, VA**FRONTROYAL-WARREN COUNTY**

TAKE-OFF MINIMUMS: **Rwy 9**, std. w/ min. climb of 409' per NM to 1100, or 2300-3 for climb in visual conditions. **Rwy 27**, NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 9**, climbing left turn via MRB R-216 to MRB VORTAC before proceeding on course, do not exceed 180 knots until MRB VORTAC; or for climb in visual conditions: cross Front Royal-Warren County Airport at or above 2900 MSL before proceeding on course.

NOTE: **Rwy 9**, multiple trees beginning 148' from departure end of runway, 99' right of centerline, up to 100' AGL/939' MSL. Multiple trees beginning 182' from departure end of runway, 189' left of centerline, up to 100' AGL/854' MSL.

GAITHERSBURG, MD**MONTGOMERY COUNTY AIRPARK**

TAKE-OFF MINIMUMS: NOTE: **Rwy 14**, 62' AGL trees 197' right of centerline. **Rwy 32**, 63' AGL trees 335' left of centerline.

GALAX-HILLSVILLE, VA**TWIN COUNTY**

TAKE-OFF MINIMUMS: **Rwy 19**, 300-1 or std. with a min. climb of 240' per NM until passing 3000. **Rwy 1**, 300-1 or std. with a min. climb of 310' per NM until passing 3000.

GEORGETOWN, DE**SUSSEX COUNTY**

TAKE-OFF MINIMUMS: **Rwys 4, 13, 22, 31**, 300-1.

GRUNDY, VA**GRUNDY MUNI**

TAKE-OFF MINIMUMS: **Rwy 22**, 300-2 or std. with a min. climb of 240' per NM to 2700.

HAGERSTOWN, MD**HAGERSTOWN RGNL -RICHARD A. HENSON FIELD**

TAKE-OFF MINIMUMS: **Rwy 2**, 300-1.

DEPARTURE PROCEDURE: **Rwy 9**, climbing left turn to 2500 via 040° heading to intercept the HGR R-084 before departing as cleared. **Rwys 2, 20**, climb to 2000 before turning eastbound.

HOT SPRINGS, VA**INGALLS FIELD**

TAKE-OFF MINIMUMS: **Rwy 7**, 500-1 or std. with a min. climb of 320' per NM to 4400. **Rwy 25**, 600-1 or std. with a min. climb of 390' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 7**, climb runway heading to 4400 before proceeding on course.

Rwy 25, climb runway heading to 5000 before proceeding on course.

INDIAN HEAD, MD**MARYLAND**

TAKE-OFF MINIMUMS: **Rwy 36**, 300-1½ or std. w/ min. climb of 360' per NM to 600.

NOTE: **Rwy 18**, trees abeam departure end of runway, 125' left of centerline, up to 100' AGL/256' MSL. Trees 269' from departure end of runway, on centerline, 100' AGL/256' MSL. Trees abeam departure end of runway, 125' right of centerline, up to 100' AGL/256' MSL. Tower 6170' from departure end of runway, 620' right of centerline, 190' AGL/384' MSL. **Rwy 36**, trees 258' from departure end of runway, 309' left of centerline, up to 100' AGL/271' MSL. Tree 567' from departure end of runway, 125' left of centerline, 60' AGL/230' MSL. Rising terrain beginning 73' from departure end of runway, 64' right of centerline, 180' MSL.

JONESVILLE, VA**LEE COUNTY**

TAKE-OFF MINIMUMS: **Rwy 7**, std. w/ min. climb of 467' per NM to 3800, or 1900-3 for climb in visual conditions. **Rwy 25**, std. w/ min. climb of 442' per NM to 3500, or 1900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 7, 25**, for climb in visual conditions cross Lee County Airport at or above 3200 before proceeding on course.

NOTE: **Rwy 7**, terrain 116' from departure end of runway, 72' right of centerline, 1439' MSL. Terrain 691' from departure end of runway, 53' right of centerline, 1459' MSL. Terrain 267' from departure end of runway, 190' left of centerline, 1439' MSL. Terrain 479' from departure end of runway, 68' left of centerline, 1459' MSL.

LANGLEY AFB (KLFJ)

HAMPTON, VA

..... Orig 07354

..... **Rwy 8**, 500-3*

* Or standard with minimum climb of 240 ft/NM to 700.

NOTE: Rwy 26, cross DER at or above

10' AGL/18' MSL.

TAKE-OFF OBSTACLES: **Rwy 8**, Boat 2261' from DER, 779' left of centerline, 60' AGL/80' MSL. Boat 2500' from DER, 59' left of centerline, 60' AGL/70' MSL. Vehicle on road 1051' from DER, 702' right of centerline, 15' AGL/43' MSL. Boat 2841' from DER, 641' right of centerline, 60' AGL/80' MSL. Multiple towers 2.0 NM from DER, 1.7 NM right of centerline, 503' AGL/511' MSL. Rwy 26, Tree 4050' from DER, 685' left of centerline, 100' AGL/120' MSL. Tree 4840' from DER, 687' left of centerline, 100' AGL/136' MSL. Tree 4044' from DER, 31' left of centerline, 101' AGL/113' MSL. Tree 4153' from DER, 342' right of centerline, 101' AGL/114' MSL. Tree 4037' from DER, 623' right of centerline, 101' AGL/110' MSL. Tree 4377' from DER, 435' right of centerline, 100' AGL/121' MSL. Tree 3805' from DER, 1184' right of centerline, 100' AGL/133' MSL.

LAUREL, DE

LAUREL

DEPARTURE PROCEDURE: **Rwys 15, 33**, climb runway heading to 1200 before proceeding on course.

LAWRENCEVILLE, VA

LAWRENCEVILLE/BRUNSWICK MUNI

TAKE-OFF MINIMUMS: **Rwys 6, 24**, NA.NOTE: **Rwy 18**, trees 1654' from departure end of

runway, 772' left of centerline, 88' AGL/407' MSL.

Trees 200' from departure end of runway, on centerline,

22' AGL/321' MSL. **Rwy 36**, trees 1487' from departure

end of runway, 20' left of centerline, 88' AGL/420' MSL.

Trees 113' from departure end of runway, 372' right of centerline, 88' AGL/420' MSL.

LEESBURG, VA

LEESBURG EXECUTIVE (JYO)

AMDT 1 09183 (FAA)

DEPARTURE PROCEDURE: **Rwy 35**, climb heading 351° to 900 before proceeding on course.

NOTE: **Rwy 17**, building 167' from DER, 360' left of

centerline, 22' AGL/401' MSL. Pole 958' from DER,

373' left of centerline, 32' AGL/421' MSL. Trees

beginning 138' from DER, left and right of centerline,

up to 100' AGL/464' MSL. **Rwy 35**, terrain 96' from

DER, 453' left of centerline, 381' MSL. Tree 1078' from

DER, 525' left of centerline, up to 100' AGL/413' MSL.

Trees 682' from DER, 333' right of centerline, up to

100' AGL/459' MSL. Pole 638' from DER, 642' right of

centerline, 49' AGL/428' MSL.

LEONARDTOWN, MD

ST. MARY'S COUNTY RGNL

NOTES: **Rwy 11**, multiple trees beginning 88' from departure end of runway, 339' left of centerline, up to 80' AGL/205' MSL. Multiple trees beginning 61' from departure end of runway, 193' right of centerline up to 80' AGL/205' MSL. **Rwy 29**, multiple trees beginning 996' from departure end of runway, 227' left of centerline up to 79' AGL/221' MSL. Multiple trees beginning 596' from departure end of runway, 277' right of centerline up to 71' AGL/213' MSL. Multiple towers on buildings beginning 53' from departure end of runway, 400' right of centerline up to 26' AGL/168' MSL. Equipment on building 223' from departure end of runway, 449' right of centerline, 15' AGL/169' MSL. Tower 402' from departure end of runway, 399' right of centerline, 33' AGL/175' MSL. Fence 496' from departure end of runway, 241' right of centerline, 22' AGL/164' MSL.

LOUISA, VA

LOUISA COUNTY/FREEMAN FIELD (LKU)

ORIG 08157 (FAA)

NOTE: **Rwy 9**, trees beginning abeam departure end of runway, 369' right of centerline, up to 100' AGL/589' MSL. Trees beginning 226' from departure end of runway, 541' left of centerline, up to 100' AGL/559' MSL. Trees beginning 1200' from departure end of runway, left and right of centerline, up to 100' AGL/539' MSL. **Rwy 27**, trees beginning abeam departure end of runway, 350' right of centerline, up to 100' AGL/569' MSL. Trees beginning 211' from departure end of runway, 133' right of centerline, up to 100' AGL/569' MSL. Trees beginning 69' from departure end of runway, 513' left of centerline, up to 100' AGL/569' MSL. Trees beginning 586' from departure end of runway, left and right of centerline, up to 100' AGL/549' MSL.

LURAY, VA

LURAY CAVERNS

TAKE-OFF MINIMUMS: **Rwys 4, 22**, 1000-3

DEPARTURE PROCEDURE: Climb visually so as to cross airport at or above 2000, then continue climb to 5000 via LUA 215° bearing before proceeding on course.

LYNCHBURG, VA

FALWELL

TAKE-OFF MINIMUMS: **Rwy 10**, 1100-2½ for climb in visual conditions. **Rwy 28**, NA-obstacle.

DEPARTURE PROCEDURE: **Rwy 10**, for climb in visual conditions: cross Falwell Airport at or above 1900 before proceeding on course.

NOTE: **Rwy 10**, multiple trees 9' from departure end of runway, 87' right of centerline, up to 100' AGL/899' MSL. Multiple power lines 2896' from departure end of runway, 1192' right of centerline, up to 149' AGL/968' MSL.



LYNCHBURG, VA (CON'T)

LYNCHBURG RGNL/PRESTON GLENN
FIELD (LYH)

AMDT 8 08073 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 300-2¼ or std. w/ min. climb of 232' per NM to 1500. **Rwy 35**, std. w/ min. climb of 350' per NM to 3000, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4**, climb heading 036° to 2200 before proceeding on course. **Rwy 17**, climb heading 169° to 1800 before turning right. **Rwy 22**, climb heading 216° to 1800 before turning right. **Rwy 35**, climb heading 349° to 3000 before turning left, or for climb in visual conditions: cross Lynchburg Rgnl/Preston Glenn Field at or above 2500' MSL before proceeding on course.

NOTE: **Rwy 4**, trees beginning 2029' from departure end of runway, 62' right of centerline up to 81' AGL/999' MSL. Trees beginning 1422' from departure end of runway, 3' left of centerline up to 76' AGL/995' MSL. Poles beginning 427' from departure end of runway, 483' right of centerline up to 44' AGL/1044' MSL. Obstruction lights on fence beginning 2' from departure end of runway, 500' right of centerline up to 30' AGL/948' MSL. Antenna on building 395' from departure end of runway, 277' right of centerline 15' AGL/954' MSL. Light 606' from departure end of runway, 599' right of centerline, 18' AGL/982' MSL. Building 400' from departure end of runway, 345' right of centerline, 12' AGL/951' MSL. **Rwy 17**, trees beginning 284' from departure end of runway, 77' left of centerline up to 277' AGL/1195' MSL. Trees beginning 265' from departure end of runway, 178' right of centerline up to 57' AGL/969' MSL. Obstruction light on pole 9326' from departure end of runway 333' left of centerline, 270' AGL/1188 MSL. **Rwy 22**, trees beginning 274' from departure end of runway, 245' right of centerline up to 41' AGL/979' MSL. Trees beginning 2616' from departure end of runway, 206' left of centerline up to 41' AGL/979' MSL. Poles beginning 2872' from departure end of runway, 603' right of centerline up to 44' AGL/982' MSL. **Rwy 35**, trees beginning 2955' from departure end of runway, 140' right of centerline up to 96' AGL/ 1014' MSL. Trees beginning 722' from departure end of runway, 71' left of centerline up to 119' AGL/1037' MSL. Pole 36' from departure end of runway 98' left of centerline, 25' AGL/ 943' MSL.

MANASSAS, VA

MANASSAS RGNL/HARRY P. DAVIS FIELD

NOTE: **Rwy 16R**, terrain 64' from departure end of runway, 136' right of centerline, 179' MSL. Numerous trees beginning 242' from departure end of runway, 53' right of centerline up to 100' AGL/279' MSL. Vehicle on road 886' from departure end of runway, 463' right of centerline, 15' AGL/214' MSL. Terrain 33' from departure end of runway, 427' left of centerline, 179' MSL. Numerous trees beginning 688' from departure end of runway, 40' left of centerline, up to 100' AGL/279' MSL. **Rwy 16L**, terrain 56' from departure end of runway, 177' left of centerline, 179' MSL. Numerous trees beginning 1911' from departure end of runway, 158' left of centerline, up to 83' AGL/292' MSL. Terrain 87' from departure end of runway, 386' right of centerline, 179' MSL. Numerous trees beginning 2559' from departure end of runway, 29' right of centerline, up to 100' AGL/273' MSL. **Rwy 34R**, sign 70' from departure end of runway, 91' right of centerline, 6' AGL/ 196' MSL. Terrain beginning 23' from departure end of runway, 222' right of centerline, up to 199' MSL. Vehicle on road 198' from departure end of runway, 9' right of centerline, 15' AGL/214' MSL. Numerous trees beginning 1860' from departure end of runway, 828' right of centerline, 70' AGL/280' MSL. Numerous trees beginning 2875' from departure end of runway, 484' left of centerline, up to 27' AGL/266' MSL. **Rwy 34L**, terrain 107' from departure end of runway, 409' right of centerline, 189' MSL. Numerous trees beginning 2802' from departure end of runway, 251' right of centerline, up to 27' AGL/266' MSL. Terrain 76' from departure end of runway, 154' left of centerline, 189' MSL. Vehicle on road 366' from departure end of runway, 19' left of centerline, 15' AGL/204' MSL. Numerous trees beginning 1603' from departure end of runway, 249' left of centerline, up to 43' AGL/252' MSL. Tower 3398' from departure end of runway, 1102' left of centerline, 68' AGL/274' MSL.

MARION/WYTHEVILLE, VA

MOUNTAIN EMPIRE

TAKE-OFF MINIMUMS: **Rwy 8**, 300-1. **Rwy 26**, 800-1. DEPARTURE PROCEDURE: **Rwy 8**, climb direct to MK NDB then climb to 5300 via 073° bearing before proceeding on course. **Rwy 26**, climb to 5400 via 253° bearing from MK NDB before proceeding on course.

MARTINSVILLE, VA

BLUE RIDGE (MTV)

AMDT 2A 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12**, std. with a min. climb of 240' per NM to 2100. **Rwy 30**, 300-1 or std. with a min. climb of 370' per NM to 1100.

DEPARTURE PROCEDURE: **Rwy 12**, climb direct BALES LOM, climb in BALES LOM holding pattern (SE, right turns, 304° inbound) to 4000 before proceeding on course. **Rwy 30**, climbing right turn direct BALES LOM, climb in BALES LOM holding pattern (SE, right turns, 304° inbound) to 4000 before proceeding on course.

NOTE: **Rwy 12**, trees 38' from departure end of runway, 380' right of centerline, 82' AGL/941' MSL. Trees 316' from departure end of runway, 320' left of centerline, 56' AGL/956' MSL.

MELFA, VA**ACCOMACK COUNTY**

NOTE: **Rwy 3**, multiple trees beginning 41' from departure end of runway, 221' right of centerline, up to 84' AGL/128' MSL. Truck on road 204' from departure end of runway, 231' left of centerline, 15' AGL/61' MSL. Multiple trees beginning 249' from departure end of runway, 14' left of centerline, up to 106' AGL/155' MSL. Truck on road 494' from departure end of runway, 228' left of centerline, 15' AGL/62' MSL. Rod on obstruction light tower 862' from departure end of runway, 402' left of centerline, 55' AGL/99' MSL. **Rwy 21**, multiple trees beginning 27' from departure end of runway, 395' right of centerline, up to 91' AGL/135' MSL. Multiple trees 504' from departure end of runway, 403' left of centerline, up to 110' AGL/144' MSL.

MIDDLETOWN, DE**SUMMIT**

TAKE-OFF MINIMUMS: **Rwy 35**, 300-1, or std. with a min. climb of 280' per NM to 400.

MITCHELLVILLE, MD**FREEWAY**

TAKE-OFF MINIMUMS: **Rwy 18**, 300-1 or std. with a min. climb of 295' per NM to 500. **Rwy 36**, 300-1 or std. with a min. climb of 500' per NM to 600.

NOTE: **Rwy 18**, trees 328' from departure end of runway, 20' AGL/178' MSL. Trees 838' from departure end of runway, 337' left of centerline, 50' AGL/220' MSL. **Rwy 36**, cross departure end of runway at or above 35' AGL/203' MSL. Road/vehicle, 231' from departure end of runway, 17' AGL/185' MSL. Trees 332' from departure end of runway, 20' AGL/188' MSL. Power poles and lines crossing centerline, 2280' from departure end of runway, 186' AGL/345' MSL.

MONETA, VA**SMITH MOUNTAIN LAKE**

TAKE-OFF MINIMUMS: **Rwys 5, 23**, 300-1.
DEPARTURE PROCEDURE: **Rwys 5, 23**, climb straight ahead to 1600 before proceeding on course.

NEWPORT NEWS, VA**NEWPORT NEWS/WILLIAMSBURG INTL**

TAKE-OFF MINIMUMS: **Rwy 20**, 300-1¼ or standard with a minimum climb of 255' per NM to 300.

NOTE: **Rwy 2**, bush 295' from departure end of runway, 291' right of centerline 22' AGL/62' MSL. Tree 937' from departure end of runway, 603' left of centerline 81' AGL/131' MSL. Pole 1221' from departure end of runway, 487' right of centerline 31' AGL/81' MSL. Tree 1275' from departure end of runway, 517' left of centerline 79' AGL/132' MSL. Multiple trees beginning 1554' from departure end of runway, 298' left of centerline up to 88' AGL/141' MSL. Tree 1686' from departure end of runway, 428' right of centerline 61' AGL/114' MSL. Tree 1849' from departure end of runway, 598' right of centerline 72' AGL/125' MSL. T-L tower 3351' from departure end of runway, 1008' left of centerline 109' AGL/161 MSL. **Rwy 7**, tree 371' from departure end of runway, 588' left of centerline 36' AGL/73' MSL. T-L tower 4120' from departure end of runway, 1324' right of centerline 93' AGL/116' MSL. T-L tower 5625' from departure end of runway, 1345' left of centerline 133' AGL/191' MSL. **Rwy 20**, bush 96' from departure end of runway, 293' left of centerline 22' AGL/52' MSL. Stack 5977' from departure end of runway, 598' left of centerline 186' AGL/227' MSL. **Rwy 25**, tree 694' from departure end of runway, 549' right of centerline 42' AGL/65' MSL. Tree 1020' from departure end of runway, 703' right of centerline 23' AGL/97' MSL. Tree 1622' from departure end of runway, 529' left of centerline 59' AGL/79' MSL. Tree 2654' from departure end of runway, 335' right of centerline 86' AGL/106' MSL. Tree 3435 from departure end of runway, 1125' right of centerline 116' AGL/139' MSL.

NORFOLK, VA**CHESAPEAKE RGNL**

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb runway heading to 500 before proceeding on course.

NOTE: **Rwy 5**, cross departure end of runway at or above 27' AGL/48' MSL. Trees 2200' from departure end of runway, 545' left of centerline, 81' AGL/102' MSL. **Rwy 23**, cross departure end of runway at or above 25' AGL/43' MSL. Trees 1600' from departure end of runway, 710' right of centerline, 62' AGL/82' MSL.

NORFOLK, VA (CON'T)

HAMPTON ROADS EXECUTIVE

TAKE-OFF MINIMUMS: **Rwy 10**, std. w/ min. climb of 217' per NM to 700, or alternatively w/ std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 2100' prior to departure end of runway or 1700-2½ for climb in visual conditions. DEPARTURE PROCEDURE: **Rwy 2**, climb heading 019° to 1600 before turning west. **Rwy 10**, climb heading 102° to 900 before proceeding on course, or for climb in visual conditions, cross Hampton Roads Executive Airport at or above 1600 before proceeding on course. **Rwy 20**, climb heading 199° to 1000 before turning North. **Rwy 28**, climb heading 282° to 1500 before turning North.

NOTE: **Rwy 2**, multiple trees beginning 693' from departure end of runway, 286' left of centerline, up to 100' AGL/124' MSL. Multiple trees beginning 917' from departure end of runway, 422' right of centerline, up to 100' AGL/124' MSL. **Rwy 10**, trees 688' from departure end of runway, 374' left of centerline, 61' AGL/85' MSL. Vehicle on road and multiple trees beginning 750' from departure end of runway, 359' right of centerline, up to 100' AGL/124' MSL. Tower 1.1 NM from departure end of runway, 1424' left of centerline, 175' AGL/192' MSL. **Rwy 20**, vehicle on road and multiple trees beginning 199' from departure end of runway, 250' left of centerline, up to 100' AGL/124' MSL. Vehicle on road and multiple trees beginning 595' from departure end of runway, 8' right of centerline, up to 100' AGL/124' MSL. **Rwy 28**, multiple trees beginning 2711' from departure end of runway, 366' left of centerline, up to 100' AGL/124' MSL. Vehicle on road 3' from departure end of runway, 112' right of centerline, 17' AGL/34' MSL. Multiple trees beginning 2595' from departure end of runway, 362' right of centerline, up to 100' AGL/124' MSL.

NORFOLK, VA (CON'T)

NORFOLK INTL

NOTES: **Rwy 5**, mobile crane 4091' from departure end of runway, 1249' right of centerline, 150' AGL/163' MSL. Multiple ship masts beginning 2761' from departure end of runway, 22' right of centerline, up to 100' AGL/100' MSL. Multiple ship masts beginning 2564' from departure end of runway, 133' left of centerline, up to 100' AGL/100' MSL. Obstruction light on pole 3978' from departure end of runway, 931' left of centerline, 138' AGL/146' MSL. Multiple towers beginning 4045' from departure end of runway, 982' left of centerline, up to 138' AGL/146' MSL. Obstruction light on pole 2898' from departure end of runway, 811' right of centerline, 84' AGL/98' MSL. Antenna 4115' from departure end of runway, 1585' right of centerline, 117' AGL/131' MSL. Tower 2974' from departure end of runway, 772' right of centerline, 90' AGL/98' MSL, obstruction light on pole 2696' from departure end of runway, 1063' left of centerline, 84' AGL/91' MSL. Bush 29' from departure end of runway, 307' right of centerline, 6' AGL/20' MSL. Tree 1459' from departure end of runway, 159' left of centerline, 41' AGL/55' MSL. Tower 2938' from departure end of runway, 1254' left of centerline, 89' AGL/94' MSL. Tree 1399' from departure end of runway, 201' right of centerline, 38' AGL/52' MSL. Sign 82' from departure end of runway, 301' left of centerline, 2' AGL/19' MSL. Terrain 23' from departure end of runway, 227' left of centerline, 0' AGL/17' MSL. **Rwy 14**, tree 2541' from departure end of runway, 432' right of centerline, 101' AGL/121' MSL. Multiple trees beginning 443' from departure end of runway, 398' left of centerline, up to 75' AGL/95' MSL. Pole 1410' from departure end of runway, 254' right of centerline, 45' AGL/62' MSL. **Rwy 23**, rod on obstruction light pole 1012' from departure end of runway, 650' right of centerline, 56' AGL/73' MSL. Multiple trees beginning 619' from departure end of runway, 584' left of centerline, up to 81' AGL/98' MSL. Obstruction light on pole 1433' from departure end of runway, 738' left of centerline, 54' AGL/71' MSL. Multiple trees beginning 323' from departure end of runway, 504' right of centerline, up to 26' AGL/43' MSL. Pole 2165' from departure end of runway, 840' right of centerline, 57' AGL/74' MSL. **Rwy 32**, multiple trees beginning 17' from departure end of runway, 460' right of centerline, up to 81' AGL/98' MSL. Multiple trees and poles beginning 60' from departure end of runway, 333' left of centerline, up to 87' AGL/92' MSL. Road 207' from departure end of runway, 231' right of centerline, 12' AGL/29' MSL. Multiple obstruction lights on towers 201' from departure end of runway, 135' left of centerline, up to 12' AGL/27' MSL.

NORFOLK NS (CHAMBERS FIELD)(KNGU)

NORFOLK, VA 08269

Rwy 28: 300-1½*

* Or standard with minimum climb of 235'/NM (DoD) or 245'/NM (civil) to 300.

TAKE-OFF OBSTACLES: **Rwy 10**: Trees with a maximum height of 100' within 1500' of departure end of rwy. Cross departure end of rwy at or above 35' AGL/48' MSL.

OAKLAND, MD

GARRETT COUNTY (2G4)

ORIG 08101 (FAA)

NOTE: **Rwy 9**, Multiple trees beginning 75' from departure end of runway, 94' left of centerline, up to 100' AGL/2939' MSL. Multiple trees beginning 76' from departure end of runway, 47' right of centerline, up to 100' AGL/2939' MSL. **Rwy 27**, Multiple trees beginning 15' from departure end of runway, 334' left of centerline, up to 100' AGL/3019' MSL. Multiple trees beginning 19' from departure end of runway, 107' right of centerline, up to 100' AGL/3019' MSL.

OCEAN CITY, MD

OCEAN CITY MUNI

TAKE-OFF MINIMUMS: **Rwys 2, 32**, 400-2 or std. with a min. climb of 260' per NM to 500.

OCEANA NAS (APOLLO SOUCEK FIELD) (KNTU)

VIRGINIA BEACH, VA. 09351

TAKE-OFF OBSTACLES: **Rwy 5L**, Trees 115' MSL, 3706' from DER, 97' right of centerline. **Rwy 5R**, Trees 115' MSL, 3706' from DER, 603' left of centerline. **Rwy 14L**, Trees 105' MSL, 2792' from DER, 7' left of centerline. **Rwy 14R**, Trees 105' MSL, 2792' from DER, 708' left of centerline.

ORANGE, VA

ORANGE COUNTY

TAKE-OFF MINIMUMS: **Rwy 8**, 300-1.

DEPARTURE PROCEDURE: **Rwys 8, 26**, climb runway heading to 1500 before turning.

PATUXENT RIVER NAS (TRAPNELL FIELD),(KNHK)

PATUXENT RIVER, MD 09267

Rwy 6, Obstacle identification surface begins 15' above DER.

Rwy 14, Obstacle identification surface begins 35' above DER.

Rwy 20, Obstacle identification surface begins 20' above DER.

Rwy 24, Obstacle identification surface begins 15' above DER.

TAKE-OFF OBSTACLES: **Rwy 6**, Pole 63' AGL/83' MSL, 1967' from DER, 981' left of centerline. **Rwy 14**, Trees 42' AGL/57' MSL, 190' from DER, 223' left of centerline. Two lane road crossing rwy thld max ht 17' AGL/33' MSL, 193' from DER. Pole 34' AGL/50' MSL, 315' from DER, 198' left of centerline. Trees 43' AGL/59' MSL, 520' from DER, 637' right of centerline. **Rwy 20**, Trees 44' AGL/81' MSL, 1555' from DER, 845' right of centerline. Trees 56' AGL/93' MSL, 2057' from DER, 778' right of centerline. Trees 67' AGL/104' MSL, 2077' from DER, 818' right of centerline. Trees 93' AGL/130' MSL, 3029' from DER, 32' left of centerline. **Rwy 24**, 43' AGL/81' MSL, 1682' from DER, 582' left of centerline. Trees 57' AGL/93' MSL, 2015' from DER, 965' left of centerline. Trees 66' AGL/104' MSL, 2056' from DER, 948' left of centerline.

PETERSBURG, VA

DINWIDDIE COUNTY (PTB)

ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwys 32, 14**, NA-obstacles.

NOTE: **Rwy 5**, numerous trees beginning 911' from departure end of runway, 551' left of centerline, up to 65' AGL/254' MSL. Fence 161' from departure end of runway, 472' right of centerline, 7' AGL/196' MSL. Tree 1031' from departure end of runway, 690' right of centerline, 57' AGL/256' MSL. **Rwy 23**, numerous trees beginning 2615' from departure end of runway, 69' right of centerline, up to 80' AGL/289' MSL. Fence 10' from departure end of runway, 476' left of centerline, 10' AGL/199' MSL. Numerous trees beginning 819' from departure end of runway, 528' left of centerline, up to 72' AGL/281' MSL.

PHILLIPS AAF (KAPG)

ABERDEEN PROVING GROUND, MD . . 07270

TAKE-OFF OBSTACLES: **Rwy 4**, vehicle on road 1059' from DER, on centerline, 10' AGL/86' MSL. Tree 1126' from DER, 118' left of centerline, 29' AGL/88' MSL. **Rwy 22**, vehicle on road 234' from DER, 27' right of centerline, 10' AGL/49' MSL. Multiple trees beginning 398' from DER, 311' right of centerline, up to 50' AGL/89' MSL. Tree 1094' from DER, 49' left of centerline, 43' AGL/62' MSL.

QUANTICO MCAF (TURNER FIELD) (KNYG)

QUANTICO, VA 09295

Diverse departures not authorized.

Rwy 2, 400-2½*

Rwy 20, 300-1¼**

* Or standard with minimum civil climb of 470 ft/NM to 600, minimum military climb of 410 ft/NM to 500.

** Or standard with minimum civil climb of 360 ft/NM to 400, minimum military climb of 320 ft/NM to 400.

DEPARTURE PROCEDURE: **Rwy 2**, Climbing right turn to 2000 direct BRV VORTAC or to assigned heading for radar vectors. **Rwy 20**, Climb to 2000 direct BRV VORTAC or as assigned for radar vectors.

TAKE-OFF OBSTACLES: **Rwy 2**, Multiple trees on rising terrain 100' AGL/296' MSL, 4075' from DER, 803' left of centerline. Multiple trees on rising terrain 100' AGL/197' MSL, 5763' from DER, 106' left of centerline. Multiple trees 100' AGL/240' MSL, 5763' from DER, 509' right of centerline. Smokestack 100' MSL, 2310' from DER, 401' left of centerline. Multiple smokestacks up to 397' MSL, 2 NM from DER, 4175' right of centerline. **Rwy 20**, Terrain 27' MSL, starting 347' from DER, 192' right of centerline. Trees 34' AGL/213' MSL, 5749' from DER, 1878' right of centerline.

QUINTON, VA

NEW KENT COUNTY

NOTE: **Rwy 10**, trees beginning 358' from departure end of runway, 6' left of centerline, up to 100' AGL/169' MSL. Trees beginning 994' from departure end of runway, 602' right of centerline, up to 100' AGL/209' MSL. Trees beginning 1396' from departure end of runway, 389' left of centerline, up to 100' AGL/209' MSL. Trees beginning 3422' from departure end of runway, left and right of centerline, up to 100' AGL/239' MSL. **Rwy 28**, trees beginning 345' from departure end of runway, 296' right of centerline, up to 100' AGL/209' MSL. Trees beginning 367' from departure end of runway, 527' left of centerline, up to 100' AGL/209' MSL. Trees beginning 2134' from departure end of runway, left and right of centerline, 100' AGL/239' MSL.

RICHMONDS, VA

TAZEWELL COUNTY

TAKE-OFF MINIMUMS: **Rwy 7**, 300-1 or std. with a min. climb of 430' per NM to 3000. **Rwy 25**, 300-1 or std. with a min. climb of 280' per NM to 2900.

DEPARTURE PROCEDURE: **Rwy 7**, climb runway heading to 4700 before proceeding southbound.

Rwy 25, climb runway heading to 4100 before proceeding southbound.

RICHMOND, VA

CHESTERFIELD COUNTY

TAKE-OFF MINIMUMS: **Rwy 15**, 800-1 or std. with a min. climb of 280' per NM to 1200. **Rwy 33**, 1200-1, or std. with a min. climb of 220' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 15**, climb runway heading to 1200' before proceeding on course.

Rwy 33, climb runway heading to 1700' before proceeding on course.

NOTE: **Rwy 15**, 18' AGL pole 1315' from departure end of runway, 304' left of centerline. **Rwy 33**, 84' AGL tree 2399' from departure end of runway, 84' left of centerline.

RICHMOND INTL

NOTE: **Rwy 2**, cross departure end of runway at or above 30' AGL/195' MSL. **Rwy 7**, cross departure end of runway at or above 34' AGL/223' MSL. **Rwy 16**, cross departure end of runway at or above 22' AGL/183' MSL. **Rwy 20**, cross departure end of runway at or above 35' AGL/193' MSL. **Rwy 25**, cross departure end of runway at or above 20' AGL/176' MSL. **Rwy 34**, cross departure end of runway at or above 10' AGL/177' MSL.

RICHMOND/ASHLAND, VA

HANOVER COUNTY MUNI (OPF)

ORIG 09239 (FAA)

NOTE: **Rwy 16**, trees beginning 48' from DER, 479' left of centerline, up to 101' AGL/291' MSL. Poles beginning 1077' from DER, 36' left of centerline, up to 36' AGL/236' MSL. Pole 1120' from DER 166' right of centerline 30' AGL/230' MSL. Trees beginning 1307' from DER, 26' left of centerline, up to 108' AGL/298' MSL. Trees beginning 1431' from DER, 319' right of centerline, up to 104' AGL/294' MSL. **Rwy 34**, road and trees beginning 149' from DER, 345' right of centerline, up to 47' AGL/247' MSL. Road and trees beginning 410' from DER, 386' left of centerline, up to 103' AGL/293' MSL. Poles beginning 660' from DER, on centerline, up to 39' AGL/239' MSL. Trees beginning 1402' from DER, 445' right of centerline, up to 100' AGL/290' MSL. Trees beginning 2714' from DER, 487' right of centerline, up to 104' AGL/304' MSL.

RIDGELY, MD

RIDGELY AIRPARK

NOTE: **Rwy 12**, multiple trees beginning 592' from departure end of runway, 6' left of centerline, up to 100' AGL/160' MSL. Multiple trees beginning 239' from departure end of runway, 338' right of centerline, up to 100' AGL/160' MSL.

ROANOKE, VA

ROANOKE RGNL/ WOODRUM FIELD (ROA)

AMD 8 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 33**, NA - obstacles.

Rwy 24, std. w/ min. climb of 216' per NM to 2600.

DEPARTURE PROCEDURE: **Rwy 15**, climb heading 154° to intercept the ROA VORTAC R-122 to 4000 before proceeding on course. **Rwy 24**, climb west on I-SZK LDA localizer course on 4200 to DIXXY Int'l-SZK 15.25 DME before proceeding on course.

NOTE: **Rwy 15**, trees 1.18 NM from departure end of runway, 2122' left of centerline, 60' AGL/1321' MSL. **Rwy 24**, bush 86' from departure end of runway, 385' left of centerline, 4' AGL/1163' MSL. Tree 150' from departure end of runway, 415' right of centerline, 60' AGL/1171' MSL. Tree 737' from departure end of runway, 454' right of centerline, 60' AGL/1179' MSL. Tree 1164' from departure end of runway, 726' right of centerline, 60' AGL/1206' MSL.

SALISBURY, MD

SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

ORIG 07354 (FAA)

NOTE: **Rwy 5**, trees and antennas beginning 961' from departure end of runway, 49' left of centerline, up to 83' AGL/135' MSL. Trees beginning 2769' from departure end of runway, 5' right of centerline, up to 85' AGL/136' MSL. **Rwy 23**, trees beginning 514' from departure end of runway, 518' left of centerline, up to 68' AGL/118' MSL. Trees and antenna beginning 774' from departure end of runway, 303' right of centerline, up to 76' AGL/127' MSL. Trees beginning 2835' from departure end of runway, 186' right of centerline, up to 75' AGL/125' MSL. **Rwy 32**, trailer, hangar and obstruction light beginning 120' from departure end of runway, 509' left of centerline, up to 23' AGL/72' MSL. Trees beginning 2215' from departure end of runway, 140' left of centerline, up to 79' AGL/128' MSL.



SALUDA, VA**HUMMEL FIELD**

DEPARTURE PROCEDURE: **Rwys 1, 19**, climb runway heading to 1000 before turning on course.

NOTE: **Rwy 1**, 23' AGL tree left of departure end of runway, 65' AGL tree 663' from departure end of runway, 129' left of centerline. **Rwy 19**, 26' AGL tree 237' from departure end of runway, 116' right of centerline.

SOUTH BOSTON, VA**WILLIAM M. TUCK**

TAKE-OFF MINIMUMS: **Rwy 1**, 300-1. **Rwys 5, 23**, NA.

NOTE: **Rwy 1**, 72' AGL tower 324' from departure end of runway, 283' left of runway centerline.

SOUTH HILL, VA**MECKLENBURG-BRUNSWICK RGNL**

TAKE-OFF MINIMUMS: **Rwy 1**, 300-1 or std. with a min. climb of 250' per NM to 1000. **Rwy 19**, 300-1 or std. with a min. climb of 370' per NM to 1000'

DEPARTURE PROCEDURE: **Rwys 1, 19**, climb runway heading to 1000 before proceeding on course.

STAFFORD, VA**STAFFORD RGNL**

DEPARTURE PROCEDURE: **Rwy 15**, climbing left turn to 2000, intercept and proceed via BRV R-310 to BRV VORTAC, before proceeding on course. **Rwy 33**, climbing left turn to 2000, intercept and proceed via BRV R-306 to BRV VORTAC, before proceeding on course.

NOTE: **Rwy 33**, cross departure end of runway at or above 34' AGL/246' MSL.

STAUNTON-WAYNESBORO-**HARRISONBURG, VA****SHENANDOAH VALLEY RGNL (SHD)****AMDT 6 09239 (FAA)**

TAKE-OFF MINIMUMS: **Rwy 5**, std. w/ min. climb of 273' per NM to 3800, or 2200-2½ for climb in visual conditions. **Rwy 23**, standard, or 2200-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 5**, climb heading 047° to 3400 before turning right, or for climb in visual conditions cross Shenandoah Valley Rgnl airport at or above 3300 before proceeding on course. **Rwy 23**, climb heading 227° to 4400 before proceeding on course, or for climb in visual conditions cross Shenandoah Valley Rgnl airport at or above 3300 before proceeding on course.

NOTE: **Rwy 5**, trees 1720' from DER, 635' right of centerline, up to 100' AGL/1279' MSL. **Rwy 23**, tree 679' from DER, 616' left of centerline, 35' AGL/1194' MSL.

STEVENSVILLE, MD**BAY BRIDGE**

TAKE-OFF MINIMUMS: **Rwy 29**, 500-3 or std. w/ min. climb of 317' per NM to 800.

NOTE: **Rwy 11**, road 354' from departure end of runway, on centerline, 17' AGL/35' MSL. Multiple trees beginning 1471' from departure end of runway, 32' left of centerline, up to 100' AGL/119' MSL. Multiple trees beginning 1485' from departure end of runway, 16' left of centerline, up to 100' AGL/119' MSL. **Rwy 29**, twin bridges 2.25 NM from departure end of runway, 2767' right of centerline, 410' AGL/410' MSL.

SUFFOLK, VA**SUFFOLK EXECUTIVE**

TAKE-OFF MINIMUMS: **Rwys 4, 7, 22**, 300-1. **Rwy 25**, 300-1 or std. w/ a min. climb of 260' per NM to 300. Alternatively, with standard takeoff minimums and a normal 200' /NM climb gradient, takeoff must occur no later than 1700' prior to departure end of runway.

NOTE: **Rwy 4**, trees 1050' from departure end of runway, 250' left of centerline, up to 100' AGL/169' MSL. Trees 1076' from departure end of runway, 105' left of centerline, up to 100' AGL/169' MSL. Powerline 1698' from departure end of runway, 825' right of centerline, 105' AGL/169' MSL. Powerline 3056' from departure end of runway, 524' right of centerline, 105' AGL/174' MSL. **Rwy 7**, trees 1143' from departure end of runway, 688' left of centerline, up to 100' AGL/169' MSL. Powerline 1211' from departure end of runway, 717' right of centerline, 105' AGL/169' MSL. Powerline 2176' from departure end of runway, 259' left of centerline, 105' AGL/169' MSL. Trees 2430' from departure end of runway, 118' right of centerline, up to 100' AGL/169' MSL. Powerline 3140' from departure end of runway, 1263' left of centerline, 105' AGL/174' MSL. **Rwy 22**, road 536' from departure end of runway, 62' left of centerline, 15' AGL/84' MSL. Trees 1403' from departure end of runway, 765' left of centerline, up to 100' AGL/169' MSL. Trees 3595' from departure end of runway, 792' right of centerline, up to 100' AGL/174' MSL. **Rwy 25**, road 198' from departure end of runway, 33' right of centerline, 15' AGL/89' MSL. Trees 805' from departure end of runway, 423' right of centerline, up to 100' AGL/169' MSL. Trees 3258' from departure end of runway, 57' right of centerline, up to 100' AGL/174' MSL.

TANGIER, VA**TANGIER ISLAND (TGI)****ORIG 09015 (FAA)**

NOTE: **Rwy 2**, vehicle on road 343' from departure end of runway, on centerline, 15' AGL/19' MSL. Boat masts 638' from departure end of runway, 632' right to 755' left of centerline, up to 63' MSL. **Rwy 20**, buildings beginning 7' from departure end of runway, 206' left of centerline, 45' AGL/50' MSL. Rock wall at departure end of runway, 57' right of centerline, 4' AGL/8' MSL.

TAPPAHANNOCK, VA**TAPPAHANNOCK-ESSEX COUNTY**

TAKE-OFF MINIMUMS: **Rwy 10**, 300-1½ or std. w/ min. climb of 303' per NM to 500. **Rwy 28**, 300-1 or std. w/ min. climb of 366' per NM to 500.

NOTE: **Rwy 10**, terrain 6' from departure end of runway, 20' left of centerline, up to 135' MSL. Terrain 29' from departure end of runway, 281' left of centerline, up to 139' MSL. **Rwy 28**, terrain beginning 12' from departure end of runway, 5' right of centerline, up to 151' MSL.

09351

WALLOPS ISLAND, VA

WALLOPS FLIGHT FACILITY (WAL)

ORIG 09127 (FAA)

NOTE: **Rwy 4**, trees beginning 1254' from DER, 741' left of centerline, up to 100' AGL/109' MSL. Trees beginning 1814' from DER, 79' right of centerline, up to 100' AGL/134' MSL. **Rwy 10**, trees beginning 1252' from DER, 818' left of centerline, up to 100' AGL/124' MSL. **Rwy 17**, trees beginning 169' from DER, 218' left of centerline, up to 100' AGL/119' MSL. **Rwy 22**, trees beginning 793' from DER, 315' left of centerline, up to 100' AGL/129' MSL. **Rwy 28**, trees beginning 945' from DER, 495' right of centerline, up to 100' AGL/139' MSL. **Rwy 35**, trees beginning 3' from DER, 394' left of centerline, up to 100' AGL/124' MSL. Trees beginning 21' from DER, 219' right of centerline, up to 100' AGL/124' MSL.

WAKEFIELD, VA

WAKEFIELD MUNI

DEPARTURE PROCEDURE: Climb straight ahead to 500 before proceeding on course.

WARRENTON, VA

WARRENTON-FAUQUIER (HWY)

ORIG 09099 (FAA)

NOTE: **Rwy 15**, trees 436' from DER, 518' right of centerline, 100' AGL/439' MSL. Vehicle on road 647' from DER, 649' right of centerline, 15' AGL/354' MSL. Trees 1034' from DER, 763' left of centerline, 100' AGL/449' MSL. Trees 1924' from DER, 781' right of centerline, 100' AGL/459' MSL. Trees beginning 2239' from DER, 41' left of centerline, up to 100' AGL/459' MSL. **Rwy 33**, trees beginning 1272' from DER, 59' right of centerline, up to 41' AGL/370' MSL. Trees beginning 2610' from DER, 116' left of centerline, up to 74' AGL/413' MSL.

WASHINGTON, DC

RONALD REAGAN WASHINGTON

NATIONAL

TAKE-OFF MINIMUMS: **Rwy 22**, 400-2½ or std. with a min. climb of 210' per NM to 500. **Rwy 33**, 700-3 or std. with a min. climb of 260' per NM to 700. **Rwy 1**, 600-2 or std. with a min. climb of 370' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 1**, left turn as soon as practicable, intercept DCA R-328. Climb to 5000 or as assigned. **Rwy 19**, climb heading 184° to 500 before turning right. **Rwy 33**, intercept DCA R-328. Climb to 5000 or as assigned.

NOTE: **Prohibited area, P-56, 1.5 NM north of airport.**

WASHINGTON DULLES INTL (IAD)

AMDT 1 08325 (FAA)

NOTE: **Rwy 1L**, tower 1918' from departure end of runway, 680' left of centerline, 56' AGL/330' MSL.

Rwy 1C, tree 2814' from departure end of runway, 1030' left of centerline, 86' AGL/345' MSL. **Rwy 1R**, post 12' from departure end of runway, 223' right of centerline, 8' AGL/294' MSL. **Rwy 12**, tree 520' from departure end of runway, 604' left of centerline, 28' AGL/307' MSL.

Rwy 30, trees beginning 161' from departure end of runway, 520' left of centerline, up to 57' AGL/396' MSL. Trees beginning 532' from departure end of runway, 600' right of centerline, up to 64' AGL/383' MSL.

WEST POINT, VA

MIDDLE PENINSULA RGNL (FYJ)

ORIG 08157 (FAA)

NOTE: **Rwy 10**, multiple trees beginning 86' from departure end of runway, left and right of centerline, up to 100' AGL/129' MSL. **Rwy 28**, multiple trees beginning 33' from departure end of runway, left and right of centerline, up to 100' AGL/119' MSL. Ship mast 3427' from departure end of runway, left and right of centerline, 135' AGL/135' MSL.

WESTMINSTER, MD

CARROLL COUNTY RGNL/JACK B. POAGE

FIELD

TAKE-OFF MINIMUMS: **Rwy 16**, 400-1 or std. with a min. climb of 210' per NM to 1300. **Rwy 34**, 300-1 or std. with a min. climb of 320' per NM to 1000.

NOTE: **Rwy 16**, 87' AGL trees 644' from departure end of runway. **Rwy 34**, 102' AGL trees 116' from departure end of runway, 220' right of centerline.

CLEARVIEW AIRPARK (2W2)

ORIG 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwy 32**, 300-2¼ or std. w/ min. climb of 290' per NM to 1200.

NOTE: **Rwy 14**, vehicles and aircraft on road/taxiway 14' from DER, 47' right to left of centerline, 15' AGL/834' MSL. Trees beginning 35' from DER, 200' left of centerline, up to 100' AGL/939' MSL. Trees beginning 21' from DER, 90' right of centerline, up to 100' AGL/919' MSL. **Rwy 32**, vehicle on road 191' from DER, 516' left of centerline, 15' AGL/774' MSL. Trees beginning 8' from DER, 24' left of centerline, up to 100' AGL/959' MSL. Trees beginning 60' from DER, 50' right of centerline, up to 100' AGL/859' MSL.

WILLIAMSBURG, VA

WILLIAMSBURG-JAMESTOWN

TAKE-OFF MINIMUMS: **Rwy 31**, 300-1.

09351

WILMINGTON, DE

NEW CASTLE

TAKE-OFF MINIMUMS: **Rwy 19**, 300-1 or std. w/ min. climb of 266' per NM to 300.

NOTE: **Rwy 1**, multiple trees beginning 751' from departure end of runway, 32' left of centerline, up to 59' AGL/120' MSL, tree 1219' from departure end of runway, 482' right of centerline, 57' AGL/118' MSL, bush 118' from departure end of runway, 385' left of centerline, 4' AGL/65' MSL. **Rwy 9**, multiple trees beginning 1229' from departure end of runway, 30' right of centerline up to 62' AGL/133' MSL, tree 975' from departure end of runway, 66' left of centerline, 53' AGL/124' MSL, light pole 948' from departure end of runway, 596' right of centerline, 44' AGL/115' MSL, tree 1740' from departure end of runway, 458' left of centerline, 83' AGL/134' MSL, light pole 945' from departure end of runway, 316' right of centerline, 38' AGL/109' MSL, rod on building 916' from departure end of runway, 457' left of centerline, 29' AGL/100' MSL. **Rwy 14**, obstacle light 553' from departure end of runway, 440' left of centerline, 29' AGL/103' MSL, rod on obstacle light 606' from departure end of runway, 615' left of centerline, 19' AGL/93' MSL. **Rwy 19**, antenna on obstruction light tower 4469' from departure end of runway, 1684' right of centerline, 153' AGL/228' MSL, tree 1575' from departure end of runway, 850' right of centerline, 45' AGL/120' MSL, obstruction light on sign 971' from departure end of runway, 448' left of centerline, 28' AGL/103' MSL. **Rwy 27**, tree 697' from departure end of runway, 533' left of centerline, 68' AGL/147' MSL. Tree 1110' from departure end of runway, 584' right of centerline, 38' AGL/117' MSL, pole 793' from departure end of runway, 615' right of centerline, 28' AGL/107' MSL, bush 408' from departure end of runway, 415' left of centerline, 12' AGL/91' MSL. **Rwy 32**, tree 711' from departure end of runway, 207' right of centerline, 29' AGL/104' MSL, tree 1162' from departure end of runway, 83' right of centerline, 32' AGL/107' MSL.

WINCHESTER, VA

WINCHESTER RGNL

TAKE-OFF MINIMUMS: **Rwy 32**, 800-2 or std. with a min. climb of 210' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 32**, climb runway heading to 1700 before turning on course.

WISE, VA

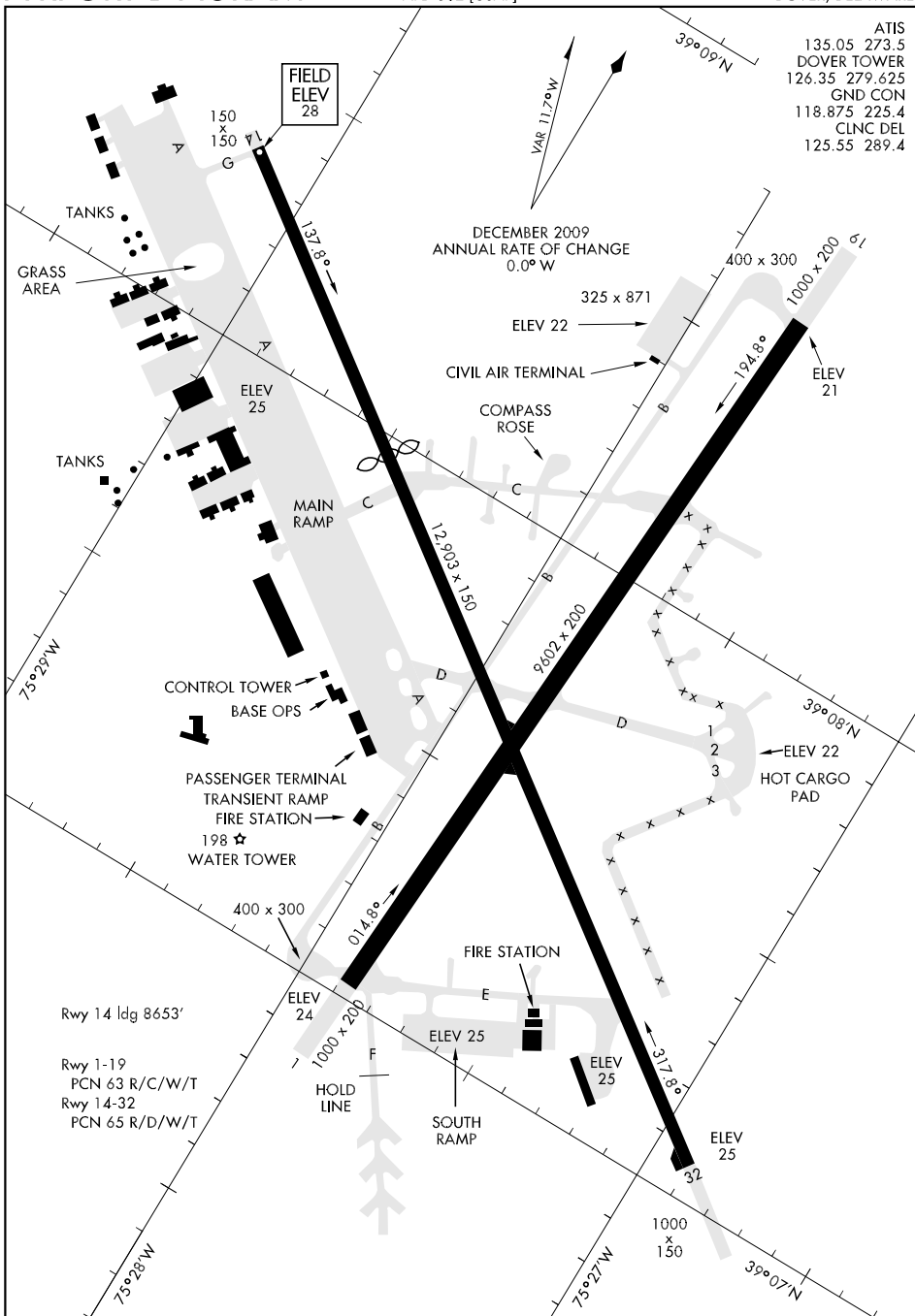
LONESOME PINE

TAKE-OFF MINIMUMS: **Rwy 24**, 1800-3 or std. with a min. climb of 400' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 6**, climb on runway heading to 3800 before proceeding on course.

Rwy 24, climb on runway heading to 4500 before proceeding on course.

NE-3, 14 JAN 2010 to 11 FEB 2010



LOC I-DOV 109.95	APCH CRS 013°	Rwy Idg 9602 TDZE 24 Arpt Elev 28
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AL-562 [USAF]

DOVER AFB (KDOV)

▼ * Circling not authorized SW of Rwy 1 and 14.

** When ALS inop, increase RVR to 40 and vis to ¾ mile. When TDZ/CL inop, increase CAT AB RVR to 24.

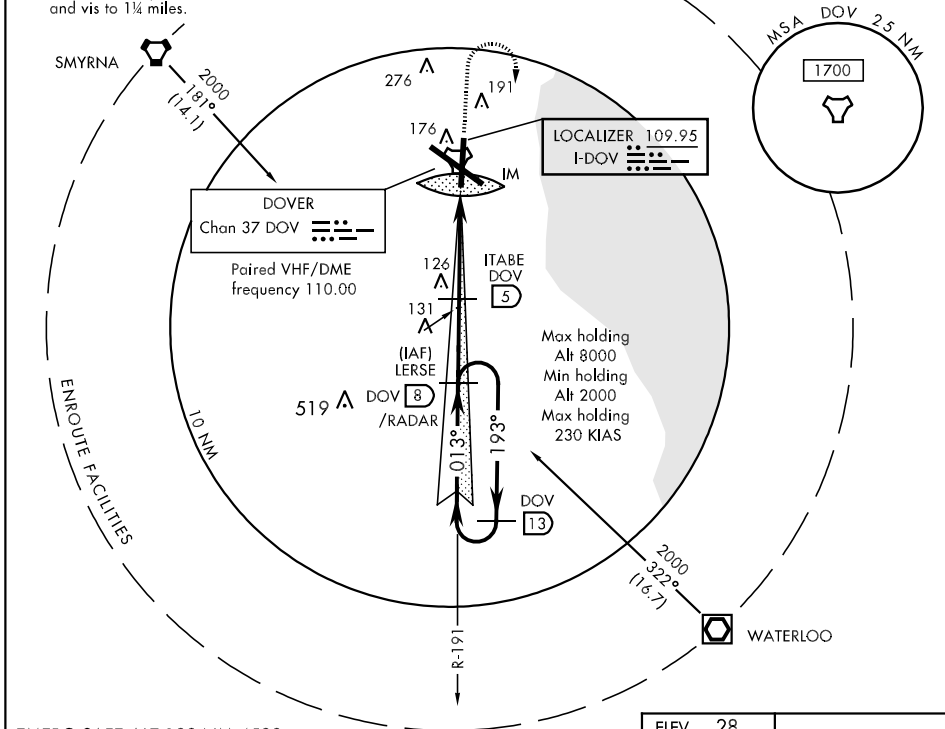
ALSF-2



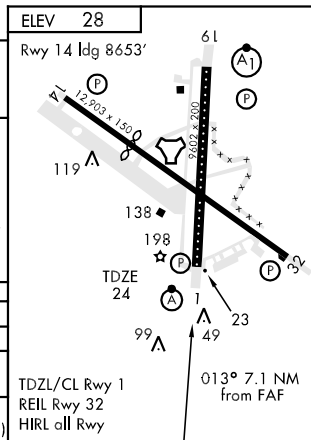
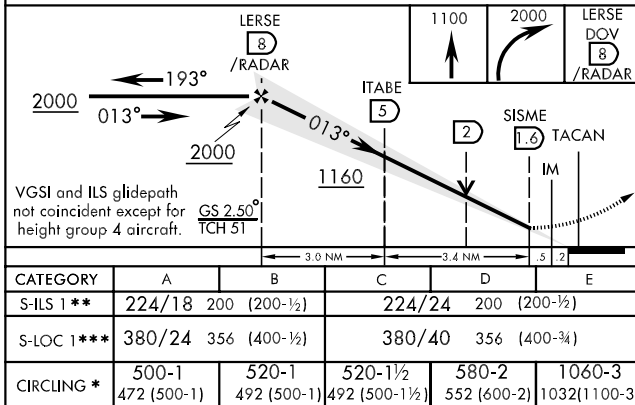
MISSED APPROACH: Climb to 1100, then climbing right turn to 2000 direct LERSE and hold.

ATIS 135.05 273.5	DOVER APP CON 132.425 257.875	DOVER TOWER 126.35 279.625	GND CON 118.875 225.4	CLNC DEL 125.55 289.4
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*** When ALS inop, increase CAT ABC RVR to 50 and vis to 1 mile, CAT DE RVR to 60 and vis to 1¼ miles.



EMERG SAFE ALT 100 NM 4500



LOC I-LIR
111.9

PCH CR
193°

Rwy Idg	9602
TDZE	22
Arpt Elev	28

AL-562 [USAF]

DOVER AFB (KDOV)

T * When ALS inop, increase RVR to 40 and vis to $\frac{3}{4}$ mile.
 ** When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile,
 CAT C RVR to 60 and vis to $1\frac{1}{4}$ miles, CAT DE vis to $1\frac{1}{2}$ miles.

ALSF-1



MISSED APPROACH: Climb to 2000 via
DOV TACAN R-191 to LERSE and hold.

ATIS
135.05 273.5

DOVER APP CON
132.425 257.875

DOVER TOWER
126.35 279.625

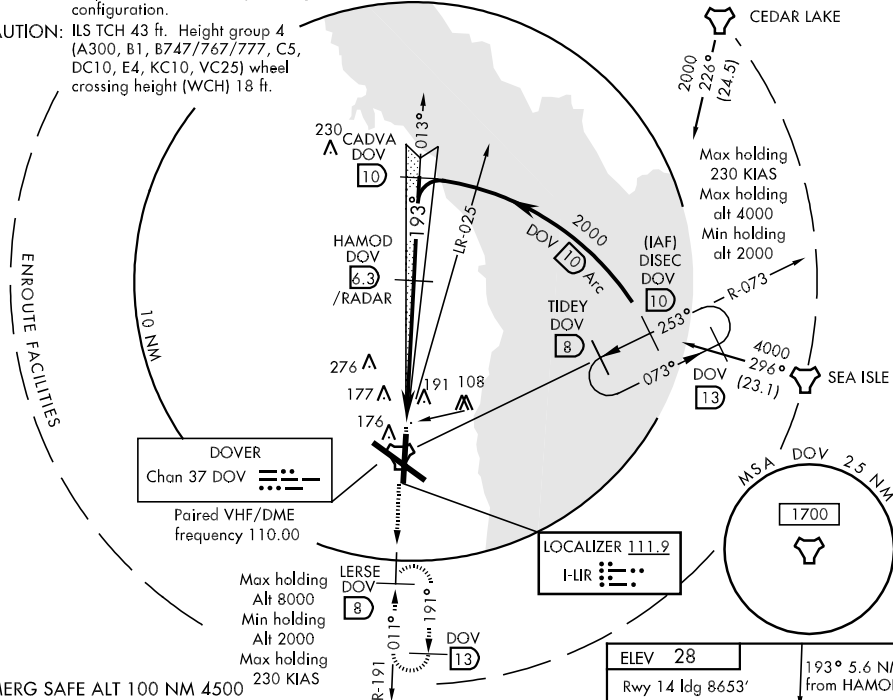
GND CON
118.875 225.4

CLNC DEL
125.55 289.4

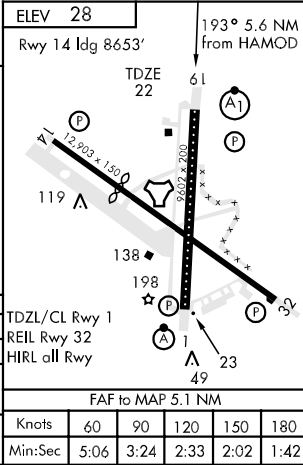
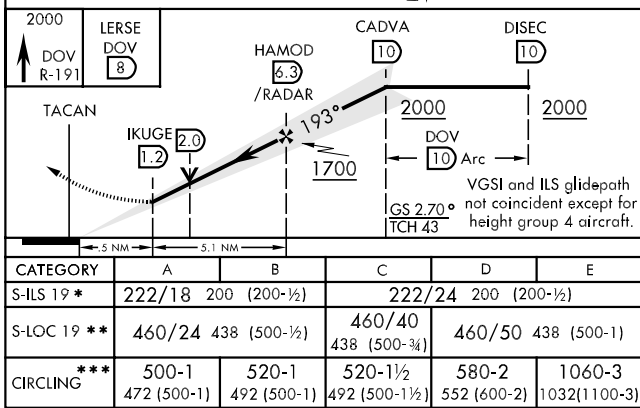
*** Circling not authorized SW of Rwy 1 and 14.

CAUTION: 3.7 NM Intermediate Segment length. Recommend early landing configuration.

CAUTION: ILS TCH 43 ft. Height group 4 (A300, B1, B747/767/777, C5, DC10, E4, KC10, VC25) wheel crossing height (WCH) 18 ft.



EMERG SAFE ALT 100 NM 4500



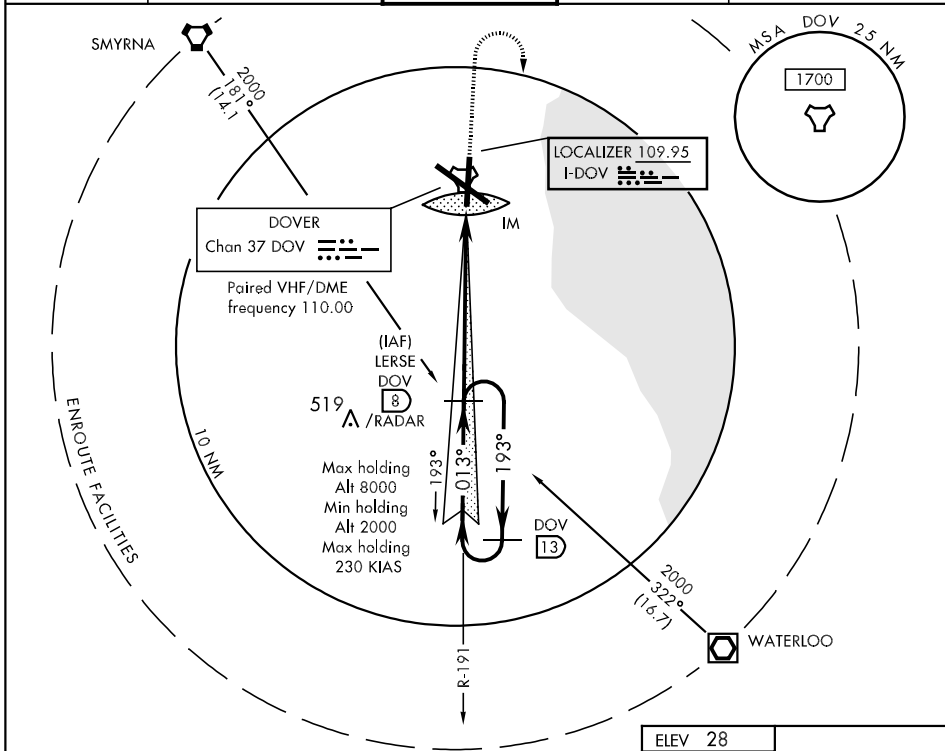
LOC I-DOV 109.95	APCH CRS 013°	Rwy Idg TDZE Arp't Elev	9602 24 28
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AL-562 [USAF]

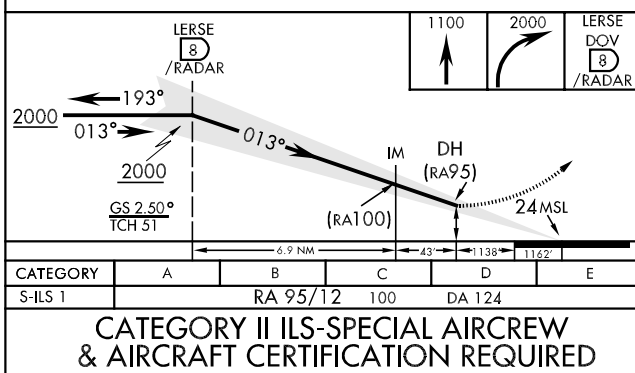
DOVER AFB (KDOV)

	ALSF-2 	MISSED APPROACH: Climb to 1100, then climbing right turn to 2000 direct LERSE and hold.
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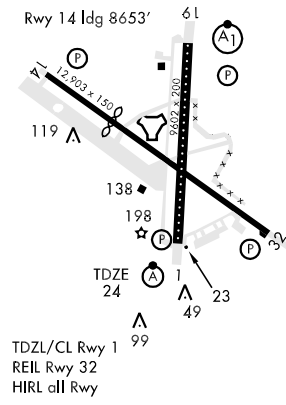
ATIS 135.05 273.5	DOVER APP CON 132.425 257.875	DOVER TOWER 126.35 279.625	GND CON 118.875 225.4	CLNC DEL 125.55 289.4
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EMERG SAFE ALT 100 NM 4500



ELEV 28



APCH CRS 013°	Rwy Idg TDZE Arpt Elev	9602 24 28
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AL-562 [USAF]

DOVER AFB (KDOV)

- ▼ * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile,
CAT C RVR to 60 and vis to 1¼ miles, CAT DE vis to 1½ miles.
** Circling not authorized SW of Rwy 1 and 14.

ALSF-2



MISSED APPROACH: Climbing right turn
to 2000 direct LARBE and hold.

ATIS 135.05 273.5

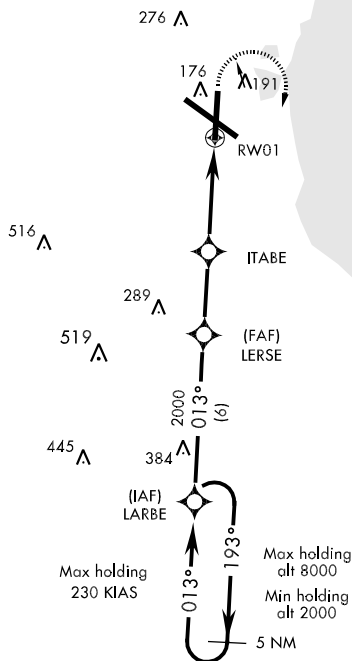
DOVER APP CON 132.425 257.875

DOVER TOWER 126.35 279.625

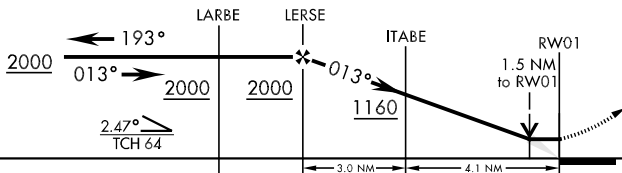
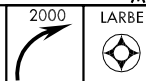
GND CON 118.875 225.4

CLNC DEL 125.55 289.4

DME/DME RNP-0.3 NA.



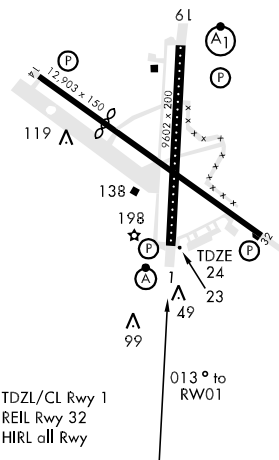
EMERG SAFE ALT 100 NM 4500

5 NM
Holding pattern

CATEGORY	A	B	C	D	E
LNAV MDA *	480/24 456 (500-½)	480/40 456 (500-¾)	480/50 456 (500-1)	480/50 456 (500-1)	480/50 456 (500-1)
CIRCLING **	500-1 472 (500-1)	520-1 492 (500-1)	520-1½ 492 (500-1½)	580-2 552 (600-2)	1060-3 1032 (1100-3)

ELEV 28

Rwy 14 Idg 8653'



TDZL/CL Rwy 1
REIL Rwy 32
HIRL all Rwy

APCH CRS	Rwy Idg	9602
193°	TDZE	22
	Arpt Elev	28

AL-562 [USAF]

DOVER AFB (KDOV)

▼ *When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT DE vis to 1½ miles.
 ** Circling not authorized SW of Rwy 1 and 14.

ALSF-1

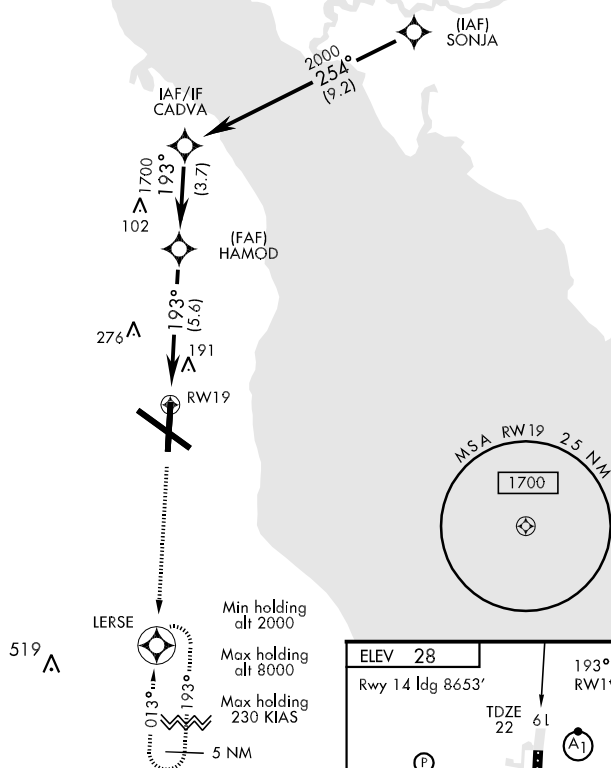


MISSED APPROACH: Climb to 2000 direct
 LERSE and hold.

ATIS	DOVER APP CON	DOVER TOWER	GND CON	CLNC DEL
135.05 273.5	132.425 257.875	126.35 279.625	118.875 225.4	125.55 289.4

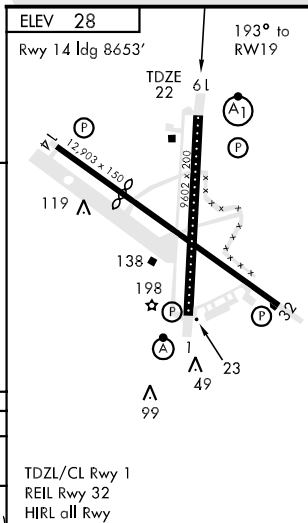
DME/DME RNP-0.3 NA

Caution: 3.7 NM intermediate
 segment length. Recommend early
 landing configuration.



EMERG SAFE ALT 100 NM 4500

↑ 2000					
			CADVA	SONJA	
			1700	2000	2000
			193°	254°	
			1.4 NM to RW19		
			5.6 NM		
			2.71°		
			TCH 64		
CATEGORY	A	B	C	D	E
LNAV MDA *	480/24 458 (500-½)		480/40 458 (500-¾)	480/50 458 (500-1)	
CIRCLING **	500-1 472 (500-1)	520-1 492 (500-1)	520-1½ 492 (500-1½)	580-2 552 (600-2)	1060-3 1032 (1100-3)



APCH CRS **316°** Rwy Idg **12,903**
TDZE **26**
Arpt Elev **28**

AL-562 [USAF]

DOVER AFB (KDOV)

▼ * Circling not authorized SW of Rwy 1-14.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn
to 2000 direct TIDEY and hold.

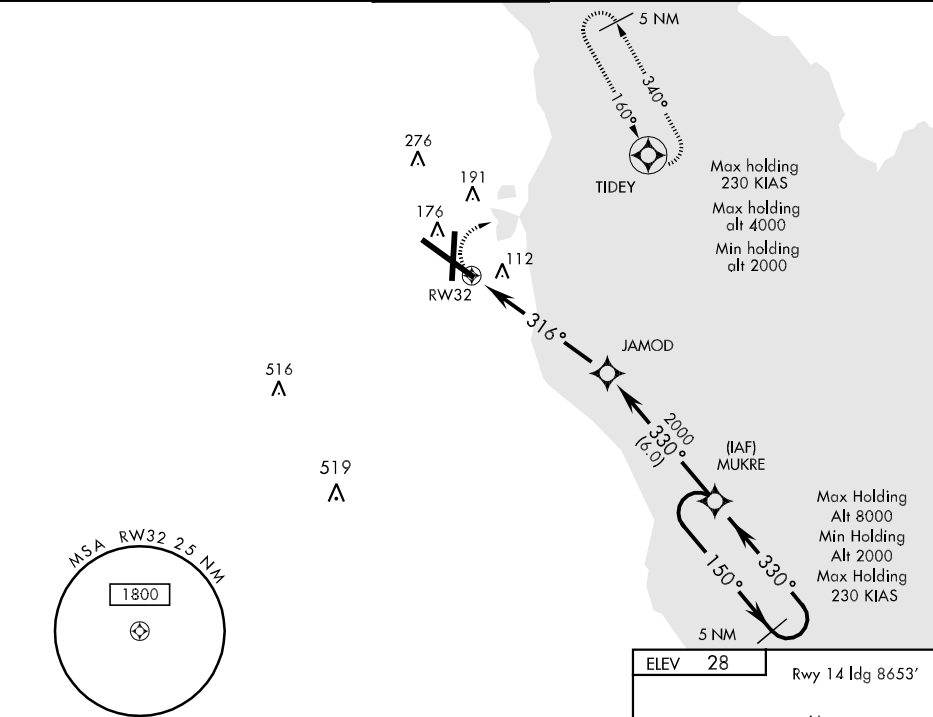
ATIS
135.05 273.5

DOVER APP CON
132.425 257.875

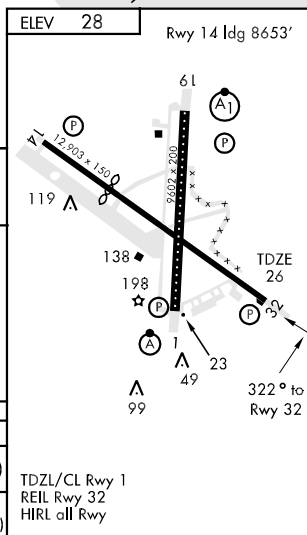
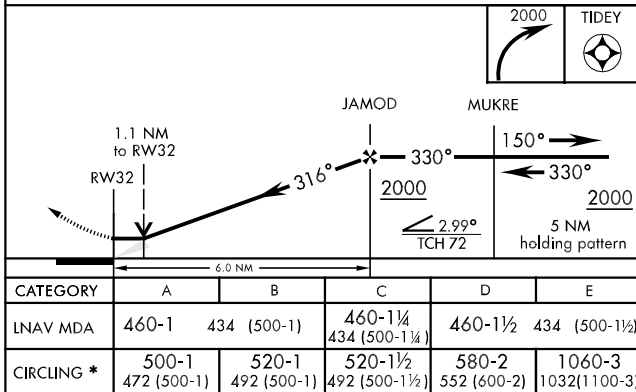
DOVER TOWER
126.35 279.625

GND CON
118.875 225.4

CLNC DEL
125.55 289.4



EMERG SAFE ALT 100 NM 4500



SEA ISLE-FIVE DEPARTURE (SIE5•SIE)

DOVER APP (RDOV)
DOVER, DELAWARE

ATIS 135.05 273.5
CLNC DEL
125.55 289.4
GND CON
118.875 225.4
DOVER TOWER
126.35 279.625
DOVER DEP CON
323.0
WASHINGTON CENTER
127.7 285.4
DOVER APP CON
132.425 257.875
DOVER RADAR
125.9 359.3

SHL-562 [USAF]

ROBBINSVILLE
113.8 RBV
Chan 85

HAMPTON
113.6 HTO
Chan 83

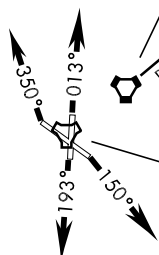
L-33-34, H-10

SEA ISLE
114.8 SIE
Chan 95

NANTUCKET
116.2 ACK
Chan 109

L-33, H-10

DOVER
Chan 37 DOV

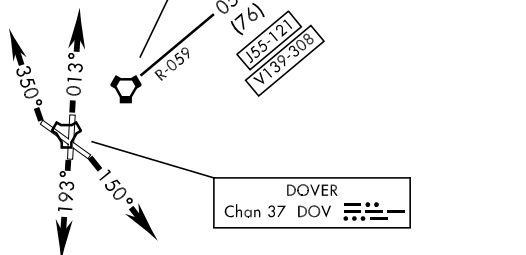


RWY 32 TODA 10,070'

Chart not to scale

MANTA

SHLEP



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 1: Climb on a track of 013° for radar vectors to SIE VORTAC. Thence ...

TAKE-OFF RWY 14: Climb on a track of 150° for radar vectors to SIE VORTAC. Thence...

TAKE-OFF RWY 19: Climb on a track of 193° for radar vectors to SIE VORTAC. Thence...

TAKE-OFF RWY 32: Climb on a track of 350° for radar vectors to SIE VORTAC. Thence ...

Via (Transition) or (Assigned Route).

HAMPTON TRANSITION: (SIE5•HTO) Via SIE R-059 and HTO VORTAC R-236 to HTO.

NANTUCKET TRANSITION: (HIGH ALT ONLY) (SIE5•ACK) Via SIE R-059, HTO VORTAC R-236 and J62 to ACK VOR/DME.

SEA ISLE-FIVE DEPARTURE (SIE5•SIE)

DOVER, DELAWARE

NE-3, 14 JAN 2010 to 11 FEB 2010

SMYRNA THREE ARRIVAL (ENO.ENO3)

ARRIVAL DESCRIPTION

CASANOVA TRANSITION (CSN.ENO3): From over CSN VORTAC via CSN R-091 and OTT R-276 to OTT VORTAC. Then from OTT VORTAC via OTT R-071 and ENO R-251 to ENO VORTAC. Thence

GORDONSVILLE TRANSITION (GVE.ENO3): From over GVE VORTAC via GVE R-098 and PXT R-238 to PXT VORTAC. Then from PXT VORTAC via PXT R-046 and ENO R-226 to ENO VORTAC. Thence

MARTINSBURG TRANSITION (MRB.ENO3): From over MRB VORTAC via MRB R-101 and BAL R-311 to BAL VORTAC. Then from BAL VORTAC via BAL R-104 and ENO R-271 to ENO VORTAC. Thence. . . .

NORFOLK TRANSITION (ORF.ENO3): From over ORF VORTAC via ORF R-030 and SBY R-211 to SBY VORTAC. Then from SBY VORTAC via SBY R-012 and ENO R-189 to ENO VORTAC. Thence. . . .

. . . . Expect radar vectors to final approach course from ENO VORTAC.

TACAN DOV Chan 37	APCH CRS 005°	Rwy Idg 9602 TDZE 24 Arpt Elev 28
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AL-562 [USAF]

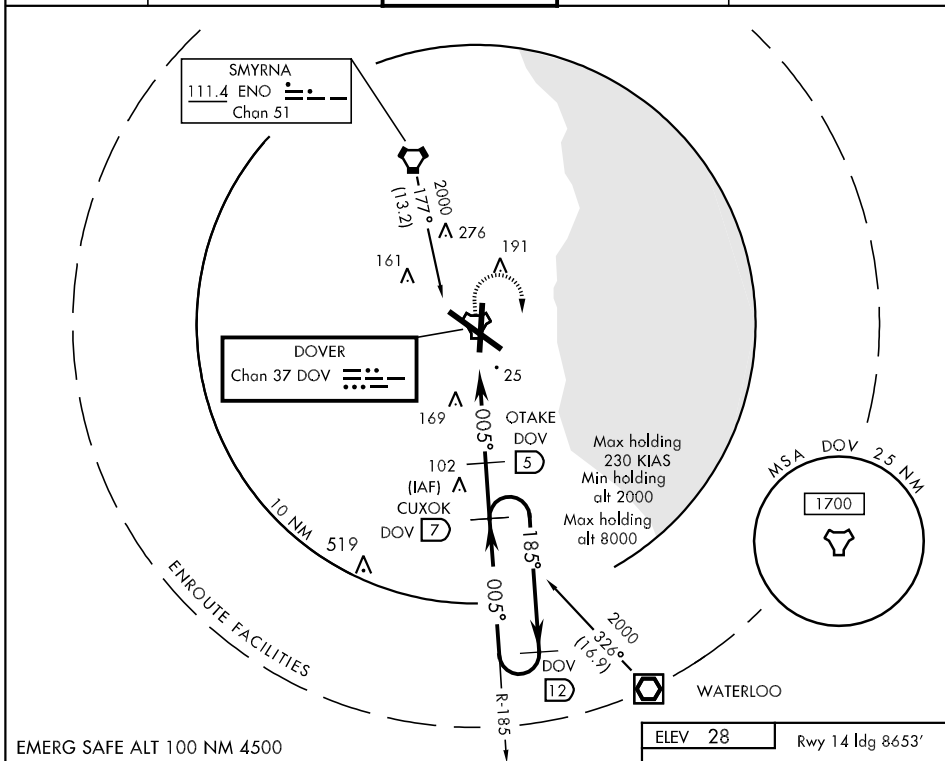
DOVER AFB (KDOV)

- T** * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT CD RVR to 60 and vis to 1¼ miles, CAT E vis to 1½ miles.
 ** Circling not authorized SW of Rwy 1 and 14.

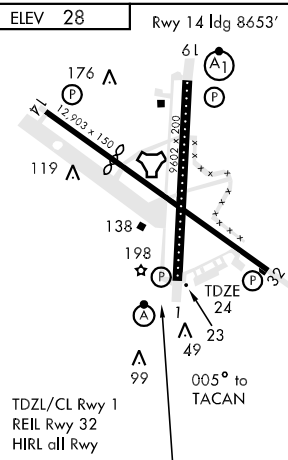
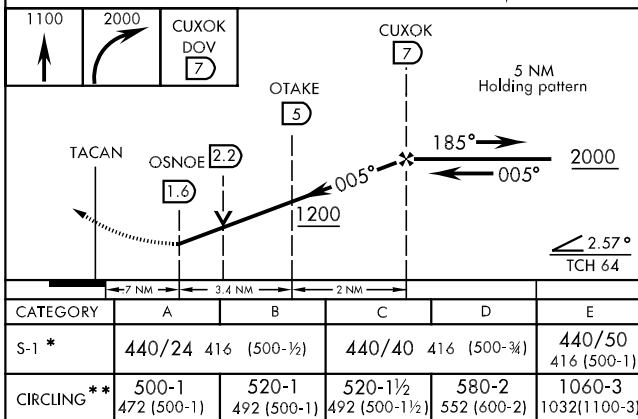
ALSF-2

MISSED APPROACH: Climb to 1100, then climbing right turn to 2000 direct CUXOK and hold.

ATIS	DOVER APP CON		DOVER TOWER		GND CON		CLNC DEL	
135.05 273.5	132.425	257.875	126.35	279.625	118.875	225.4	125.55	289.4



EMERG SAFE ALT 100 NM 4500



DOVER, DELAWARE

39° 08' N-75° 28' W

DOVER AFB (KDOV)

Orig 10014

TAGALIBAY 1

TACAN DOV
Chan 37APCH CR
201°

Rwy Idg	960
TDZE	22
Arpt Elev	28

9602

22

28

AL-562 [USAF]

DOVER AFB (KDOV)

* When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT DE vis to 1½ miles.
** Circling not authorized SW of Rwy 1 and 14.



MISSED APPROACH: Climb to 2000 via
DOV TACAN R-191 to LERSE and hold.

ATIS
135.05 273.5

DOVER APP CON
132.425 257.875

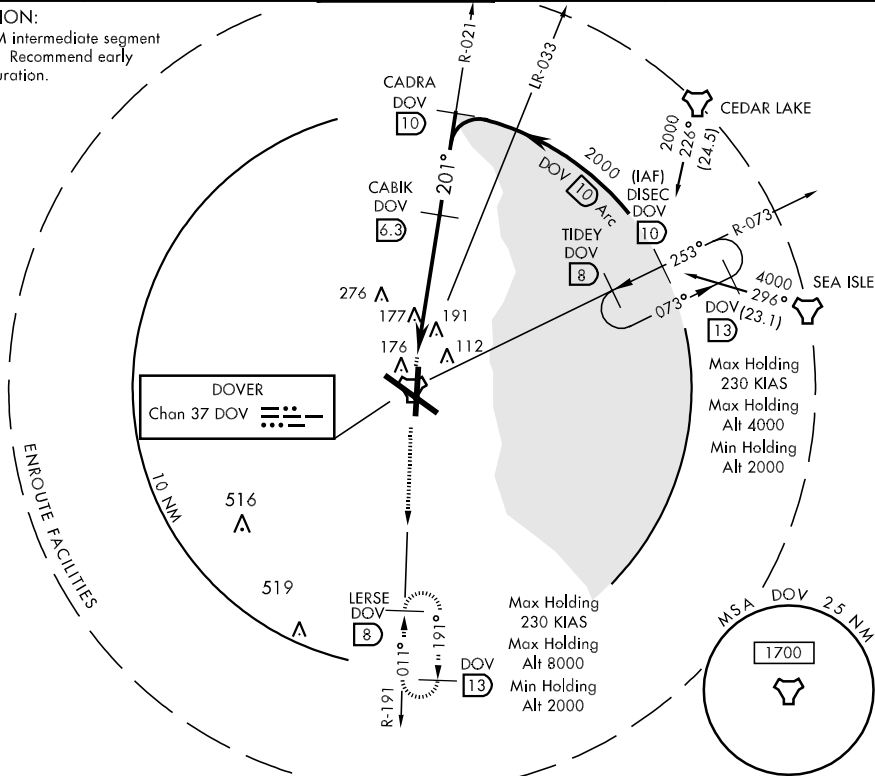
DOVER TOWER
126.35 279.625

GND CON
118.875 225.4

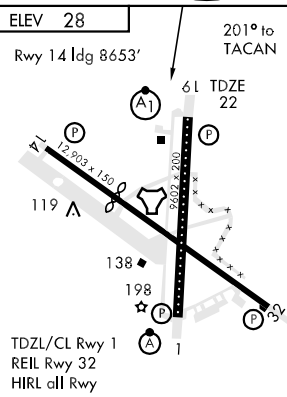
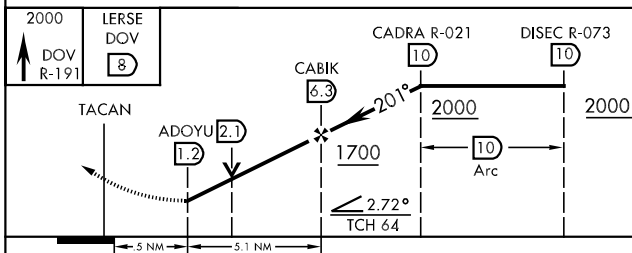
CLNC DEL
125.55 289.4

CAUTION:

3.7 NM intermediate segment length. Recommend early configuration.



EMERG SAFE ALT 100 NM 4500



CATEGORY	A	B	C	D	E
S-19 *	480/24 458 (500-½)		480/40 458 (500-¾)	480/50 458 (500-1)	
CIRCLING **	500-1 472 (500-1)	520-1 492 (500-1)	520-1½ 492 (500-1½)	580-2 552 (600-2)	1060-3 1032(1100-3)

DOVER, DELAWARE

39° 08' N-75° 28' W

DOVER AFB (KDOV)

Orig 10014

TAGANLIDAY 10

TACAN DOV	APCH CRS	Rwy Idg	12,903
Chan 37	321°	TDZE	26
		Arpt Elev	28

AL-562 [USAF]

DOVER AFB (KDOV)

* Circling not authorized SW of Rwy 1 and 14.

MISSED APPROACH: Climbing right turn to 2000, intercept DOV R-073 to DISEC. EFC with ATC.

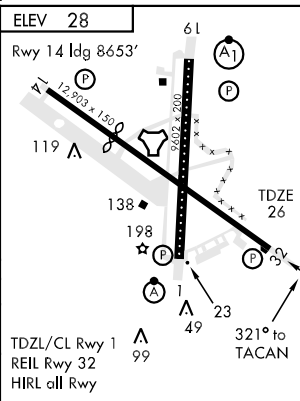
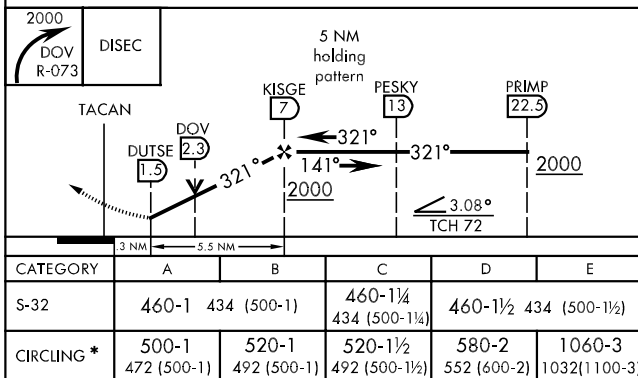
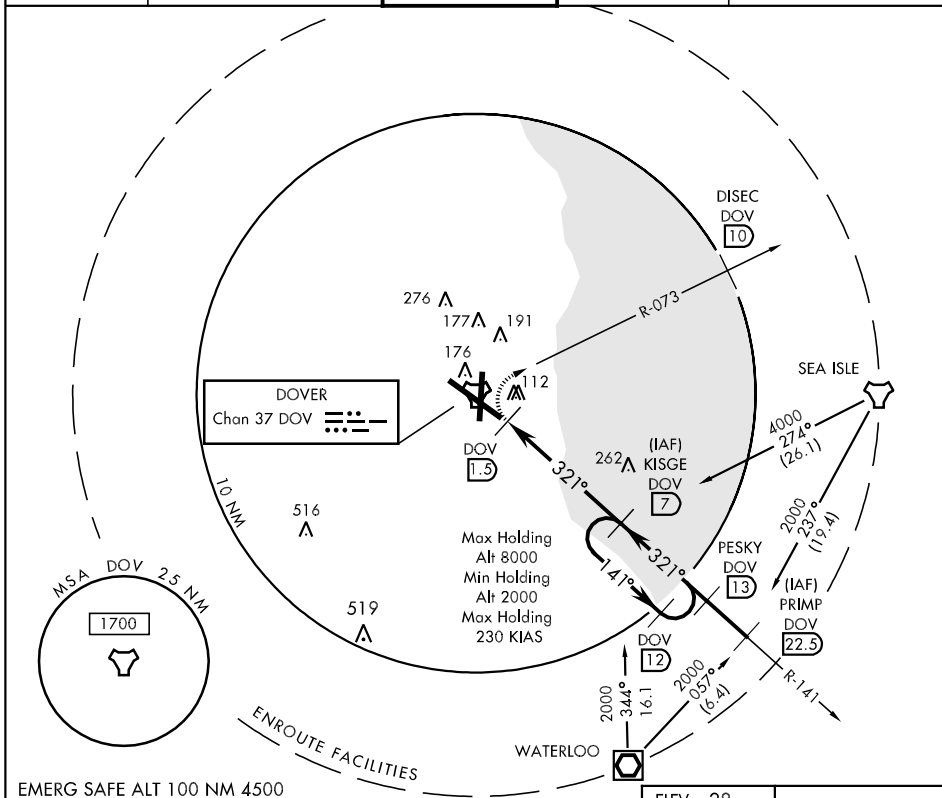
ATIS
135.05 273.5

DOVER APP CON
132.425 257.875

DOVER TOWER
126.35 279.625

GND CON
118.875 225.4

CLNC DEL
125.55 289.4



DOVER, DELAWARE

39° 08' N-75° 28' W

DOVER AFB (KDOV)

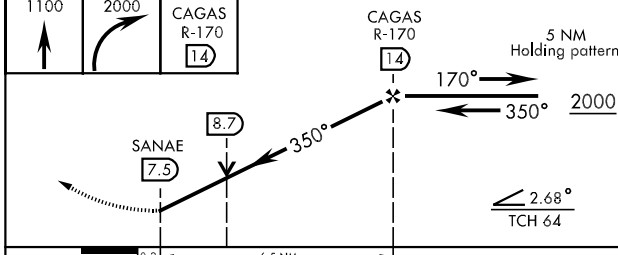
Orig 10014

TACAN LBNM 00

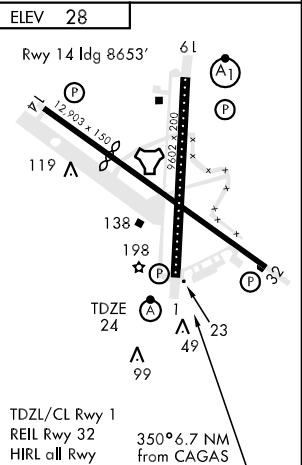
DOVER AFB (KDOV)

MISSED APPROACH: Climb to 1100, then climbing right turn to 2000 direct CAGAS and hold.

1100 ↑	2000 ↗	CAGAS R-170 14
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CATEGORY	A	B	C	D	E
S-1 *	480/24 456 (500-½)		480/40 456 (500-¾)	480/50 456 (500-1)	
CIRCLING **	500-1 472 (500-1)	520-1 492 (500-1)	520-1½ 492 (500-1½)	580-2 552 (600-2)	1060-3 1032 (1100-3)



VORTAC ENO
111.4
Chan 51

APCH CRS
344°

Rwy Idg	12,903
TDZE	26
Arpt Elev	28

AL-562 [USAF]

DOVER AFB (KDOV)

T * Circling not authorized SW of Rwy 1 and 14.

MISSED APPROACH: Climbing right turn to 2000 heading 040° to intercept VCN R-235 to BAREW (VCN R-235/20). Expect further clearance with ATC.

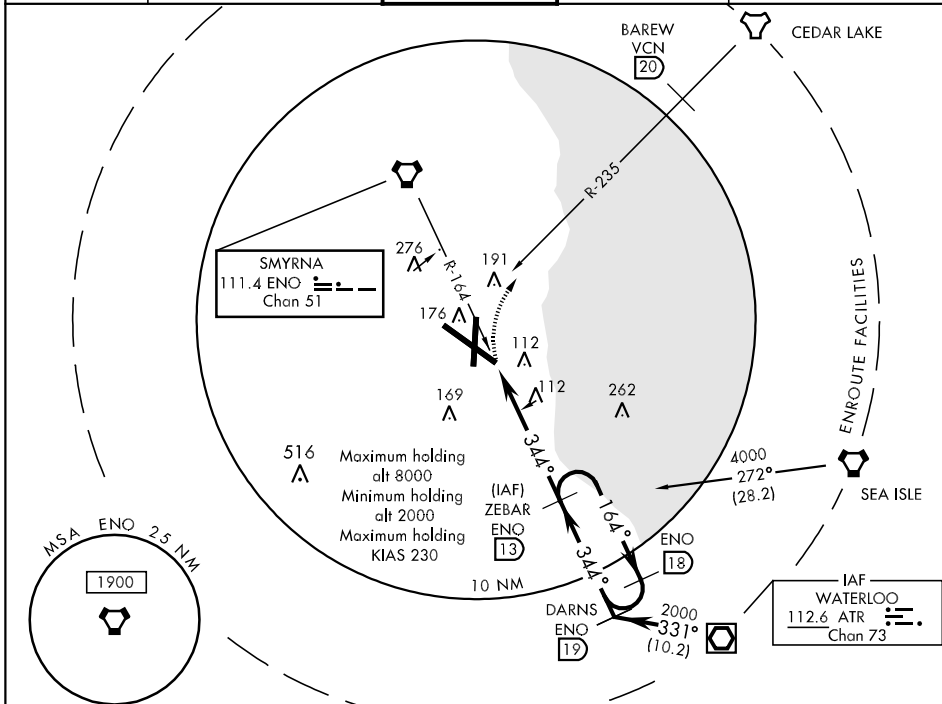
ATIS
135.05 273.5

DOVER APP CON
132.425 257.875

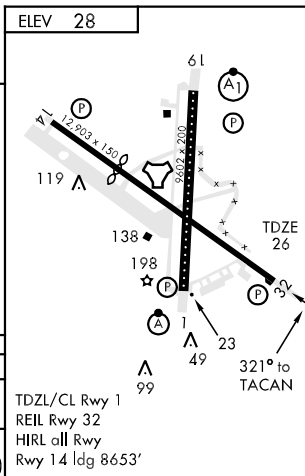
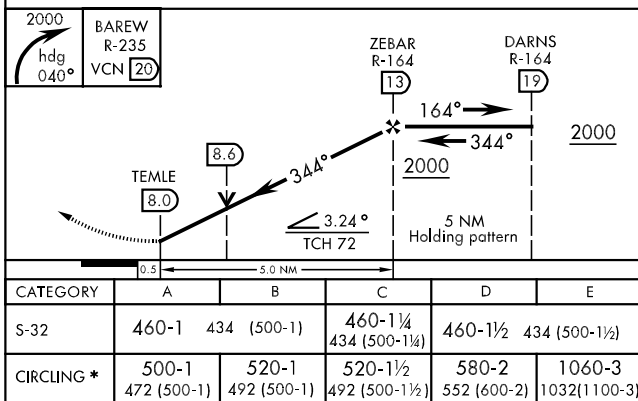
DOVER TOWER
126.35 279.625

GND CON
118.875 225.4

CLNC DEL
125.55 289.4



EMERG SAFE ALT 100 NM 4500 FROM "ENO" VORTAC



DOVER, DELAWARE

39° 08' N-75° 28' W

DOVER AFB (KDOV)

Orig 10014

VOP / DMF DMM 22

APP CRS
085°

Rwy Idg
TDZE
Apt Elev

3232
52
56

NA

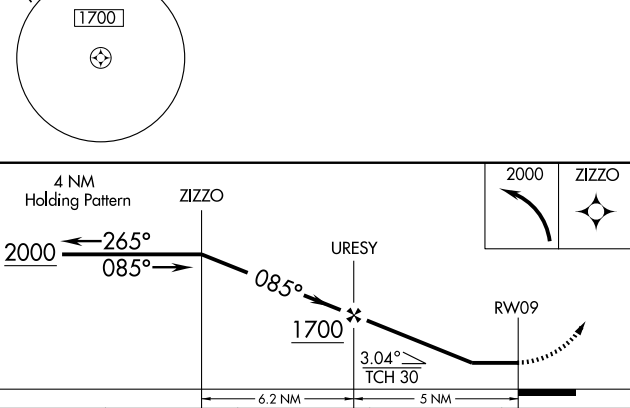
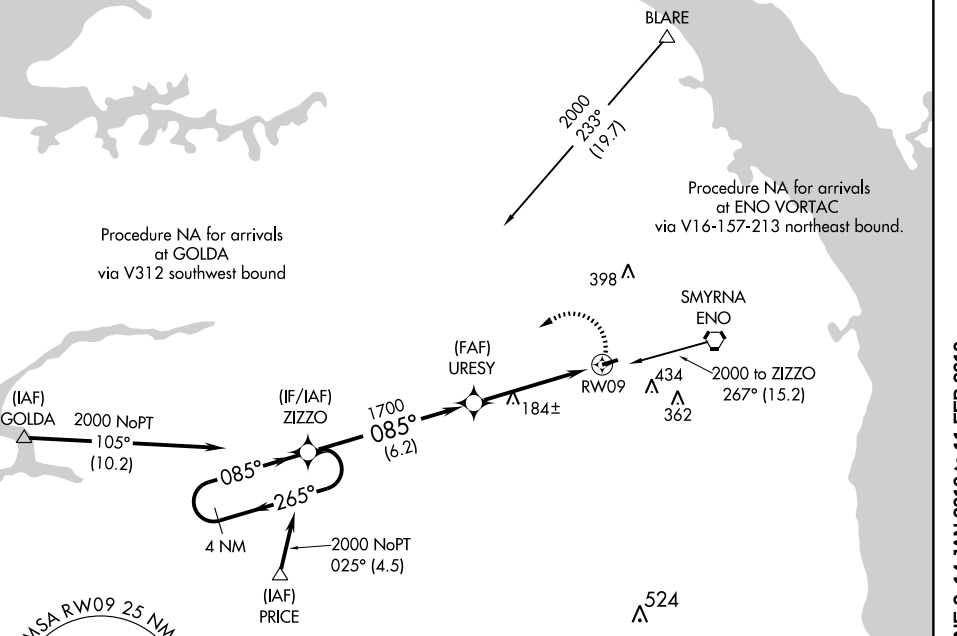
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.
Use Dover AFB altimeter setting.

MISSED APPROACH: Climbing left turn to 2000
direct ZIZZO and hold.

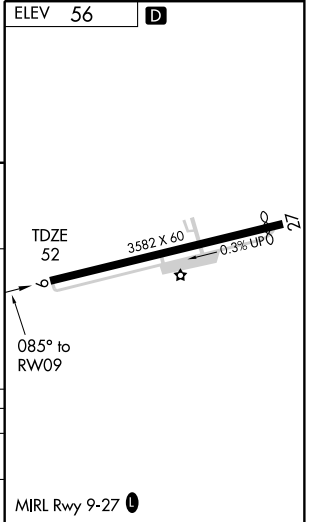
DOVER APP CON
132.425 257.875

CLNC DEL
125.55

UNICOM
123.0 (CTAF) 0



CATEGORY	A	B	C	D
LNNAV MDA	460-1	408 (500-1)	460-1¼ 408 (500-1¼)	NA
CIRCLING	580-1	524 (600-1)	820-2¼ 764 (800-2¼)	NA



NE-3, 14 JAN 2010 to 11 FEB 2010

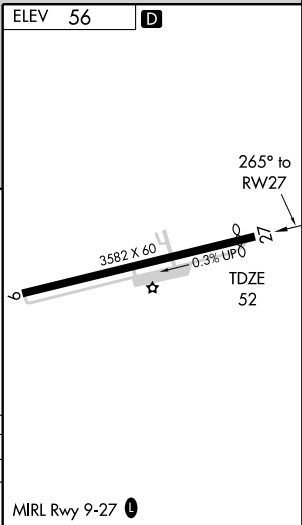
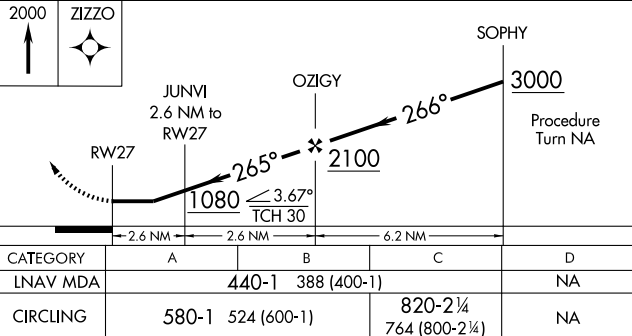
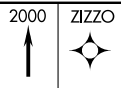
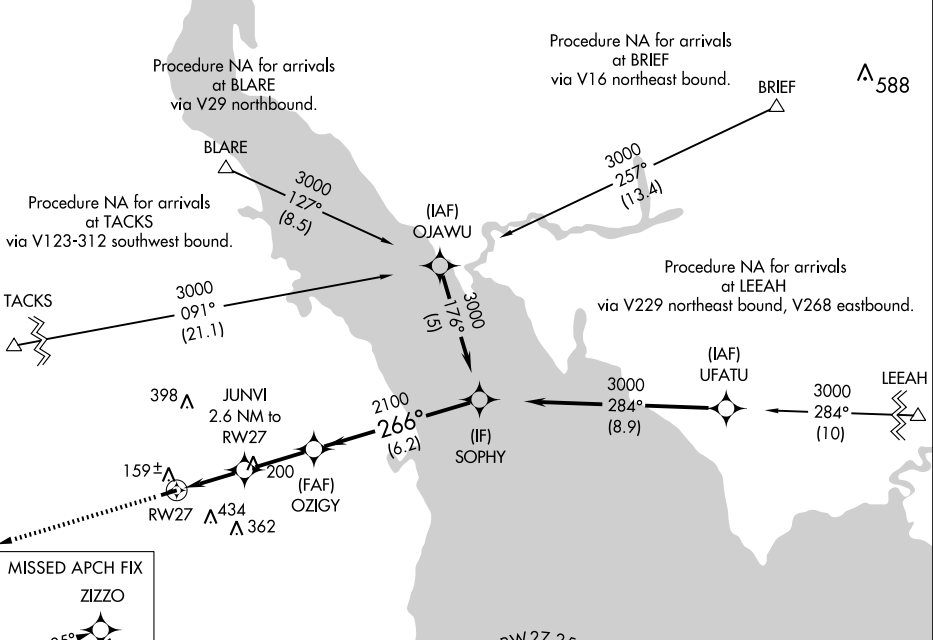
APP CRS	Rwy Idg	3232
265°	TDZE	52
	Apt Elev	56

RNAV (GPS) RWY 27

DOVER/ DELAWARE AIRPARK (33N)

▼ NA	DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA Use Dover AFB altimeter setting.	MISSED APPROACH: Climb to 2000 direct ZIZZO and hold.
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DOVER APP CON 132.425 257.875	CLNC DEL 125.55	UNICOM 123.0 (CTAF) 0
----------------------------------	--------------------	--------------------------



NE-3, 14 JAN 2010 to 11 FEB 2010

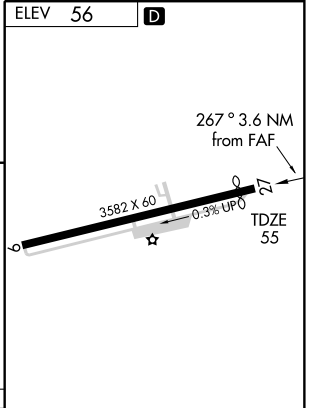
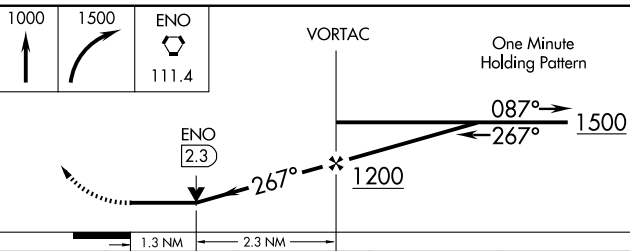
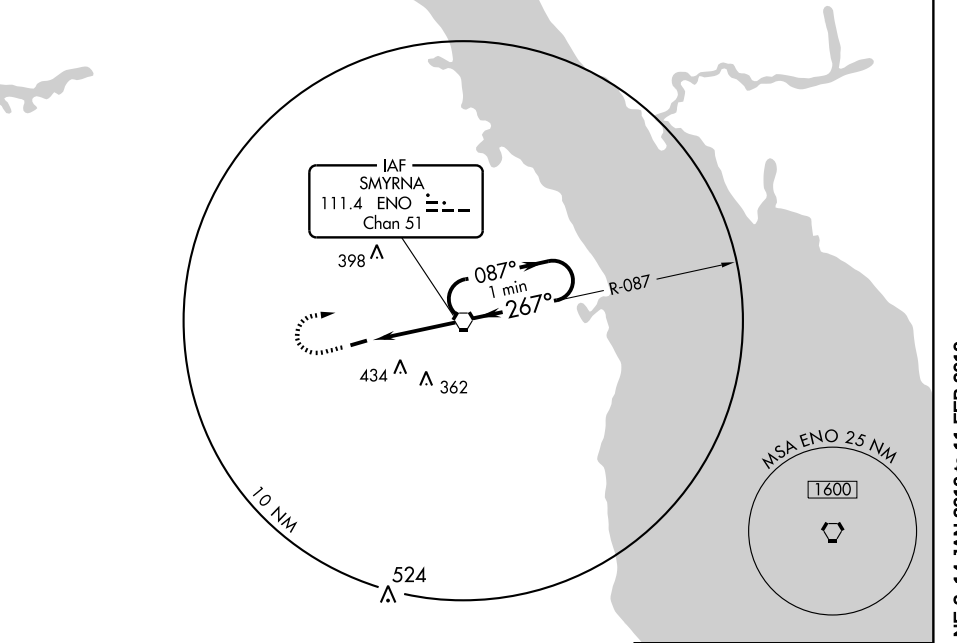
▼
▲

NA

Use Dover AFB altimeter setting.

MISSED APPROACH: Climb to 1000 then climbing right turn to 1500 direct to ENO VORTAC and hold.

DOVER APP CON 132.425 257.875	CLNC DEL 125.55	UNICOM 123.0 (CTAF) 0
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CATEGORY	A	B	C	D
S-27	520-1 465 (500-1)		520-1¼ 465 (500-1¼)	NA
CIRCLING	580-1 524 (600-1)		820-2¼ 764 (800-2¼)	NA

MIRL Rwy 9-27 0	FAF to MAP 3.6 NM				
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

NE-3, 14 JAN 2010 to 11 FEB 2010

WAAS CH 65621 W04A	APP CRS 045°	Rwy Idg 5000 TDZE 50 Apt Elev 50
--	------------------------	---

RNAV (GPS) RWY 4

GEORGETOWN / SUSSEX COUNTY (GED)



DME/DME RNP-0.3 NA. Baro-VNAV NA below -15°C (5°F). If local altimeter setting not received, use Salisbury-Ocean City Wicomico Rgnl altimeter setting and increase all DAs/MDAs 60 feet. Baro-VNAV NA when using Salisbury-Ocean City Wicomico Rgnl altimeter setting.

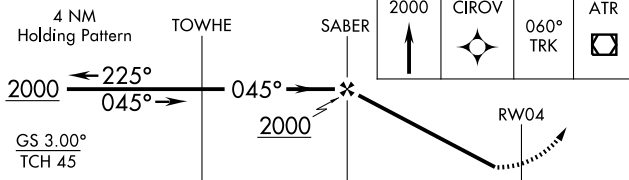
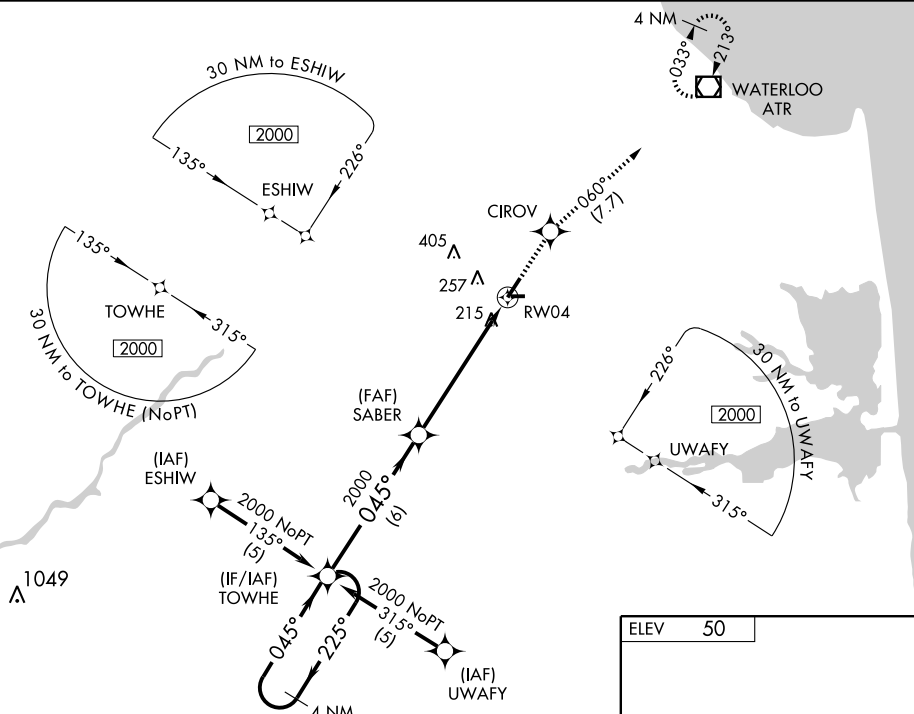
MISSED APPROACH: Climb to 2000
direct CIROV and via 060° track to
ATR VOR/DME and hold.

ASOS
118.375

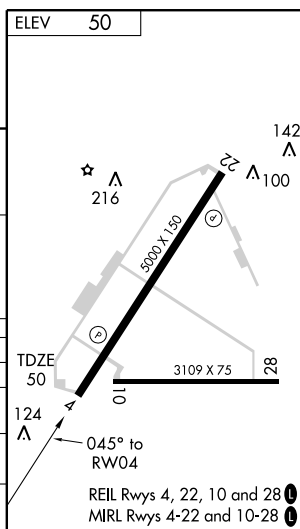
DOVER APP CON
132-425 257-875

CLNC DEL
125 55

UNICOM
123.0 (CTAF)



CATEGORY	A	B	C	D
LPV DA	470-1½ 420 (500-1½)			
LNAV/ VNAV DA	520-1¾ 470 (500-1¾)			
LNAV MDA	480-1 430 (500-1)	480-1¼ 430 (500-1¼)	480-1½ 430 (500-1½)	
CIRCLING	560-1¾ 510 (600-1¾)	600-1¾ 550 (600-1¾)	600-2 550 (600-2)	



WAAS CH 60921 W22A	APP CRS 225°	Rwy Idg TDZE Apt Elev	5000 50 50
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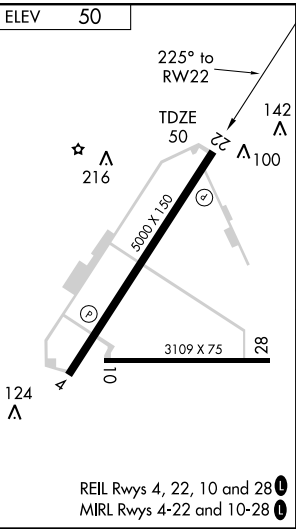
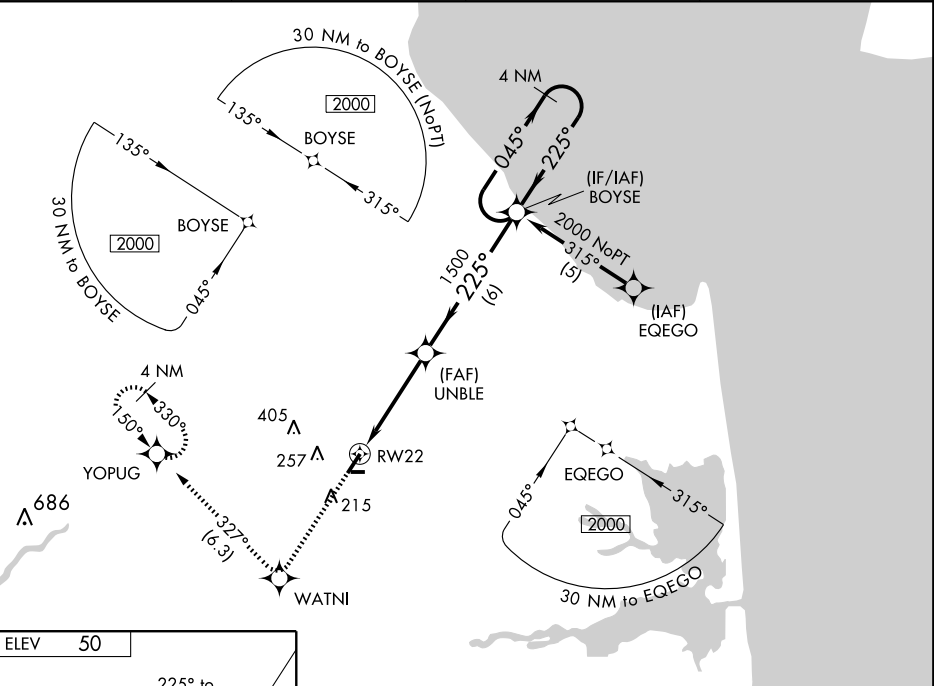
RNAV (GPS) RWY 22
GEORGETOWN / SUSSEX COUNTY (GED)

▽ DME/DME RNP-0.3 NA. Baro-VNAV NA below -15°C (56°F). If local altimeter setting not received, use Salisbury-Ocean City Wicomico Rgnl altimeter setting and increase all DAs/MDAs 60 feet. Baro-VNAV NA when using Salisbury-Ocean City Wicomico Rgnl altimeter setting.

▲

MISSED APPROACH: Climb to 2000 direct WATNI and via 327° track to YOPUG and hold.

ASOS 118.375	DOVER APP CON 132.425 257.875	CLNC DEL 125.55	UNICOM 123.0 (CTAF) ①
------------------------	---	---------------------------	--



	2000	WATNI	327° TRK	YOPUG	BOYSE	4 NM Holding Pattern
	↑	✧		✧	045° → 2000	
				UNBLE	225° ← 2000	
				1500		GS 3.00° TCH 52
				4.3 NM	6 NM	
CATEGORY	A	B	C	D		
LPV DA	360-1 310 (400-1)					
LNAV/VNAV DA	400-1¼ 350 (400-1¼)					
LNAV MDA	480-1	430 (500-1)	480-1¼ 430 (500-1¼)	480-1½ 430 (500-1½)		
CIRCLING	560-1¼	510 (600-1¼)	600-1½ 550 (600-1½)	600-2 550 (600-2)		

VOR/DME ATR
112.6
Chan **73**

APP CRS
053°

Rwy Idg	5000
TDZE	50
Apt Elev	50

VOR RWY 4
GEORGETOWN / SUSSEX COUNTY (GED)



A NA

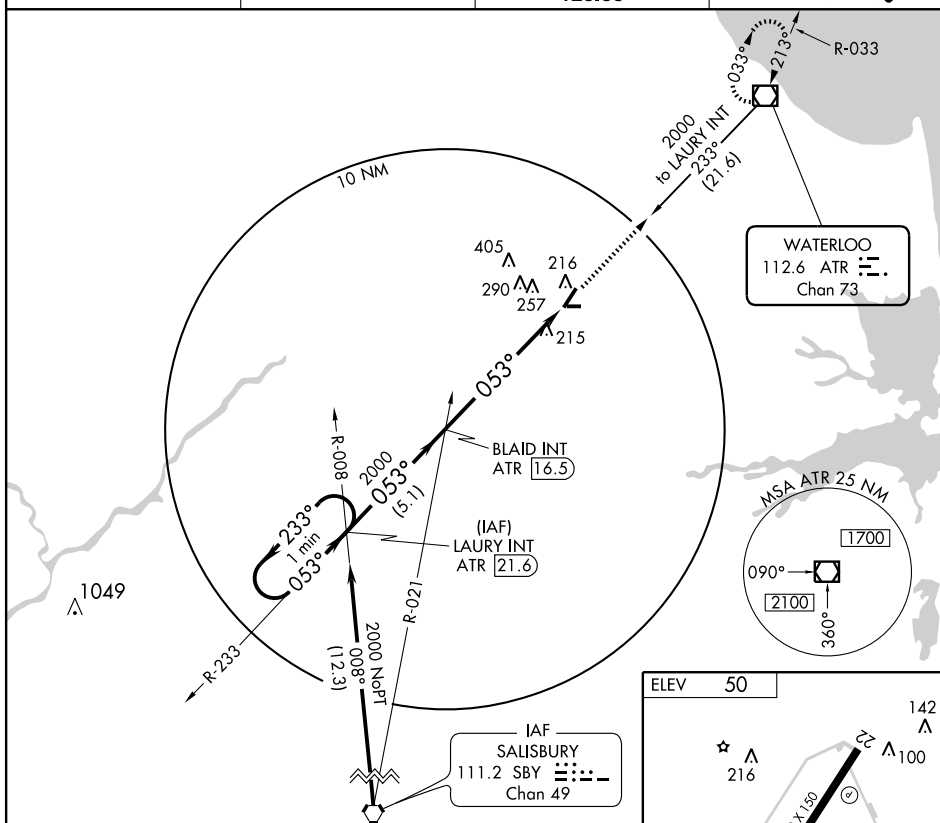
MISSED APPROACH: Climb to 2000
direct to ATR VOR/DME and hold.

ASOS
118.375

DOVER APP CON
132.425 257.875

CLNC DEL
125-55

UNICOM
123.0 (CTAF) 



One Minute Holding Pattern

LAURY INT
ATR 21.6

BLAID INT
ATR 16.5

2000	ATR
	112.6

$$\frac{2000}{\text{sec}} \xrightarrow[053^\circ \rightarrow]{\leftarrow 233^\circ} 053^\circ$$

2.96

6.1 NM -

Age Group	Percentage
18-24	10%
25-34	20%
35-44	30%
45-54	25%
55-64	15%
65-74	10%
75-84	5%
85+	5%

CATEGORY

A

5

50

2.15

10

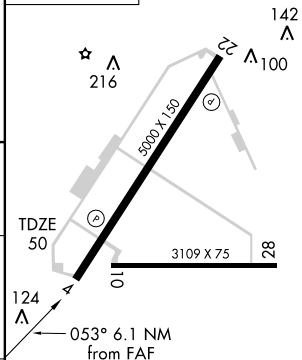
54

012

45

47

ELEV	50
------	----



REF: Rwy 4, 22, 10 and 28.

MIRL Rwy's 4-22 and 10-28 L

FAF to MAP 6.1 NM

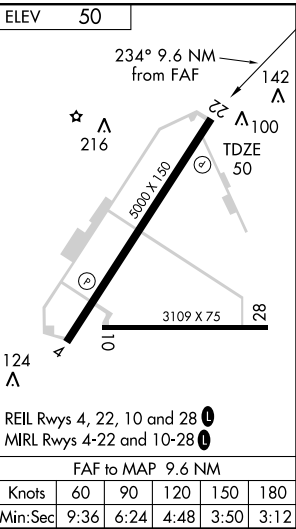
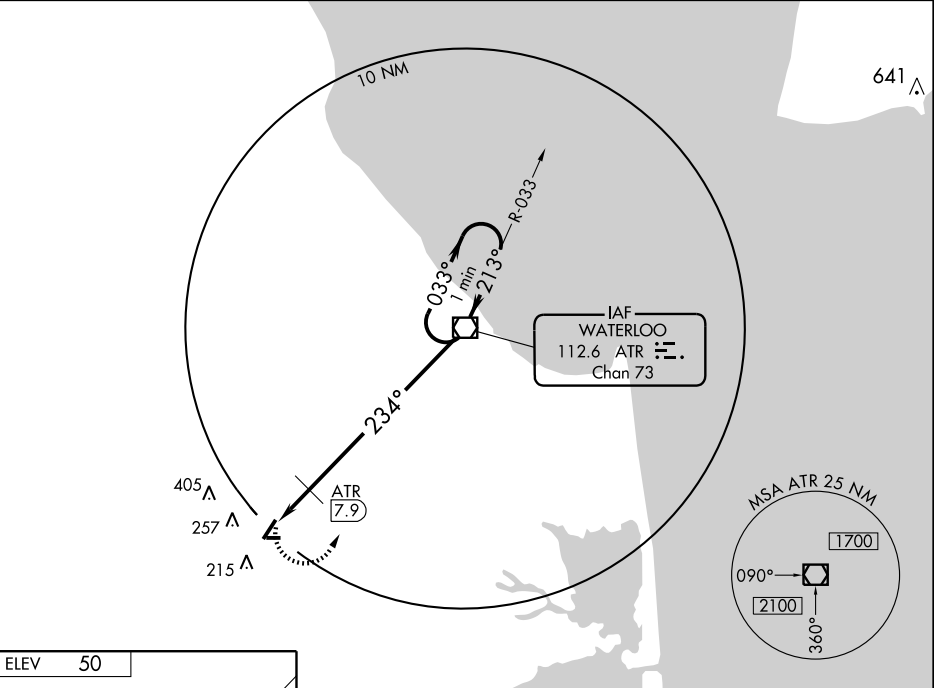
Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02

VOR/DME ATR	APP CRS	Rwy Idg	5000
112.6	234°	TDZE	50
Chan 73		Apt Elev	50

VOR RWY 22

GEORGETOWN / SUSSEX COUNTY (GED)

NA		MISSED APPROACH: Climbing left turn to 3000 direct ATR VOR/DME and hold.	
ASOS	DOVER APP CON	CLNC DEL	UNICOM
118.375	132.425 257.875	125.55	123.0 (CTAF) 0



3000 		ATR  112.6		VOR/DME One Minute Holding Pattern			
		ATR 9.6	ATR 7.9	234°	033° →	← 213°	3000
		620	2.84° TCH 52				
1.7		7.9 NM					
CATEGORY	A		B		C		D
S-22	620-1 570 (600-1)				620-1½ 570 (600-1½)		620-1¾ 570 (600-1¾)
CIRCLING	620-1 570 (600-1)				620-1½ 570 (600-1½)		620-2 570 (600-2)
DME MINIMUMS							
S-22	440-1 390 (400-1)						440-1¼ 390 (400-1¼)
CIRCLING	580-1 530 (600-1)				600-1½ 550 (600-1½)		600-2 550 (600-2)

▼

▲ NA

Obtain Salisbury altimeter setting on CTAF (122.8); when not received, use Patuxent River NAS altimeter setting. Procedure not authorized at night.

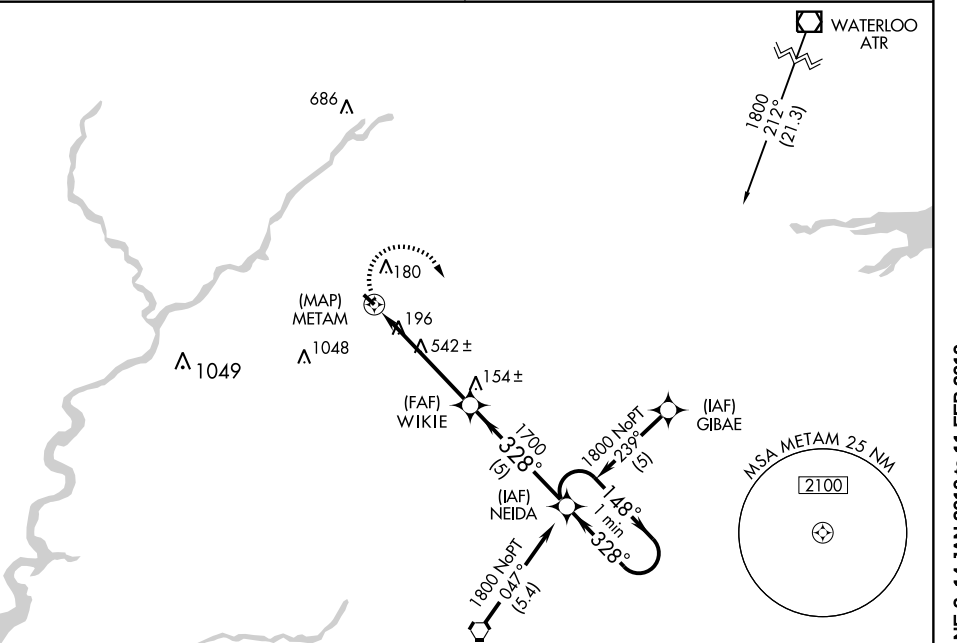
MISSED APPROACH: Climbing right turn to 1800 direct NEIDA WP and hold.

PATUXENT APP CON★

127.95 314.0

UNICOM

122.8 (CTAF) 0



ELEV 30

Rwy 33 Idg 2905'

1800

NEIDA

One Minute Holding Pattern

METAM

WIKIE

NEIDA

1700

148°

328°

1800

5 NM

5 NM

CATEGORY	A	B	C	D
CIRCLING	540-1 510 (600-1)	580-1 550 (600-1)	NA	
PATUXENT RIVER NAS ALTIMETER SETTING MINIMUMS				
CIRCLING	600-1 570 (600-1)	660-1 630 (700-1)	NA	

URL Rwy 15-33 0

REIL Rwy 15

REIL Rwy 33 0

3175 x 220

328° to METAM

NE-3, 14 JAN 2010 to 11 FEB 2010

NDB-A

MIDDLETOWN / SUMMIT (EVY)

LOM IL 248	APP CRS 064°	Rwy Idg TDZE Apt Elev	N/A N/A 70
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▼ When local altimeter setting not received, use Wilmington altimeter setting and increase all MDA 40 feet, increase Circling Cat D visibility ¼ mile.

▲ NA

MISSED APPROACH: Climbing right turn to 2000 via heading 288° and 244° bearing from HADIN LOM to USTIN INT/DQO 15.4 DME and hold, continue climb-in-hold to 2000.

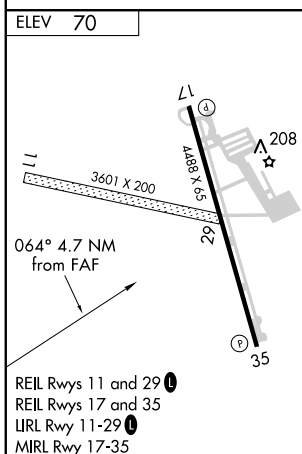
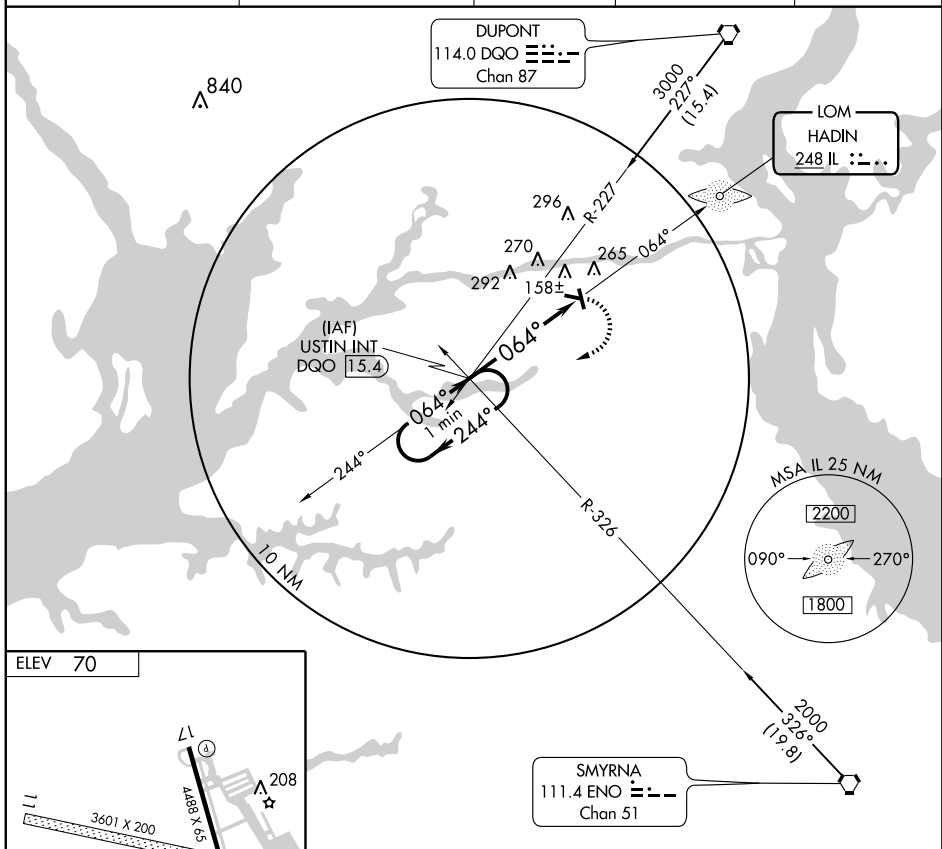
AWOS-3
132.325

PHILADELPHIA APP CON
118.35 323.1

CLNC DEL
125.3

UNICOM
122.725 (CTAF)

123.5 **0**



One Minute
Holding Pattern

USTIN INT
DQO 15.4

2000
hdg
288°

IL 244°

USTIN
INT

2000

1700

064°

4.7 NM

FAF to MAP 4.7 NM

CATEGORY

A

B

C

D

CIRCLING

700-1 630 (700-1)

700-1¼
630 (700-1¼)

720-2
650 (700-2)

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

WAAS CH 49002 W17A	APP CRS 175°	Rwy Idg TDZE Apt Elev 70 70	4488
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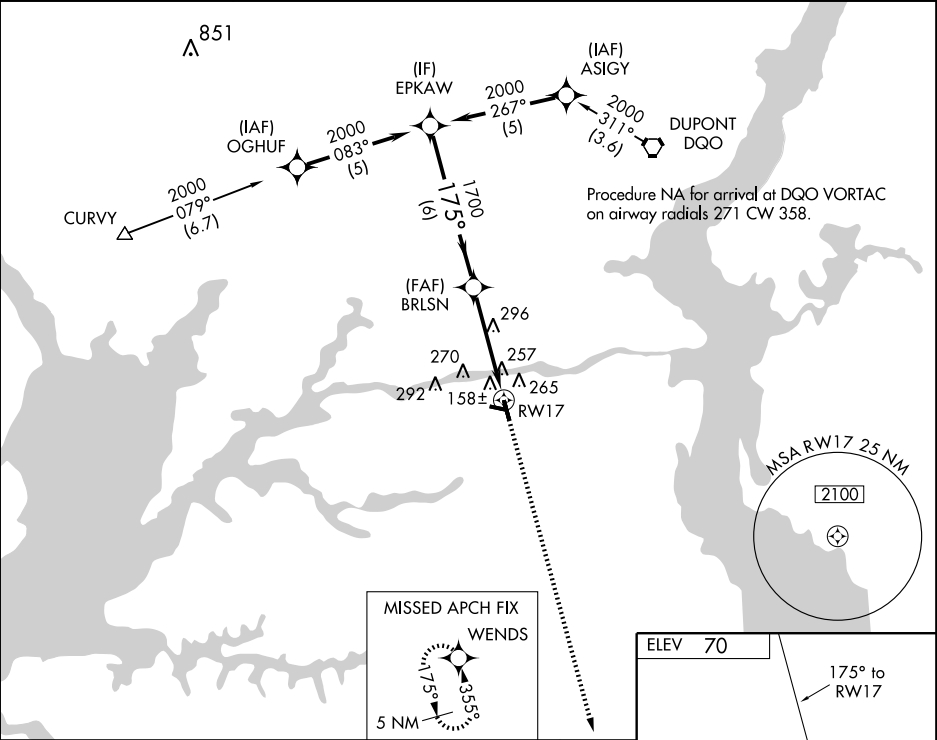
RNAV (GPS) RWY 17

MIDDLETOWN / SUMMIT (EVY)

⚠ Baro-VNAV NA when using Wilmington altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 97°C (206°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. If local altimeter setting not received, use Wilmington altimeter setting and increase all DAs/MDAs 40 feet.

MISSED APPROACH: Climb to 2000 direct WENDS and hold.

AWOS-3 132.325	PHILADELPHIA APP CON 118.35 323.1	CLNC DEL 125.3	UNICOM 122.725 (CTAF)	123.5 Ⓛ
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EPKAW VGSI and RNAV glidepath not coincident. 2000 WENDS

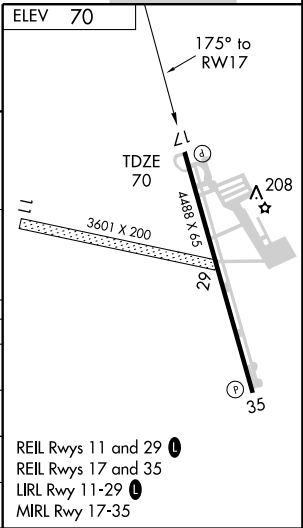
2000
Procedure Turn NA
GS 3.50°
TCH 56

175°
1700

6 NM 4.2 NM

RW17

CATEGORY	A	B	C	D
LPV DA	608-1¾	538 (600-1¾)		NA
LNAV/VNAV DA	619-1¾	549 (600-1¾)		NA
LNAV MDA	600-1	530 (600-1)		NA
CIRCLING	660-1	590 (600-1)		NA



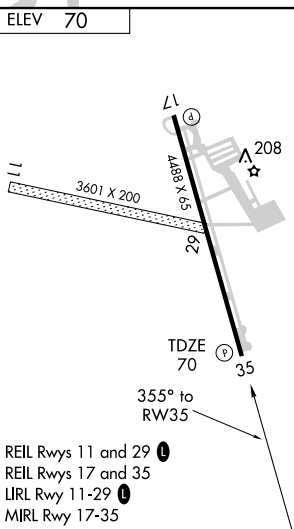
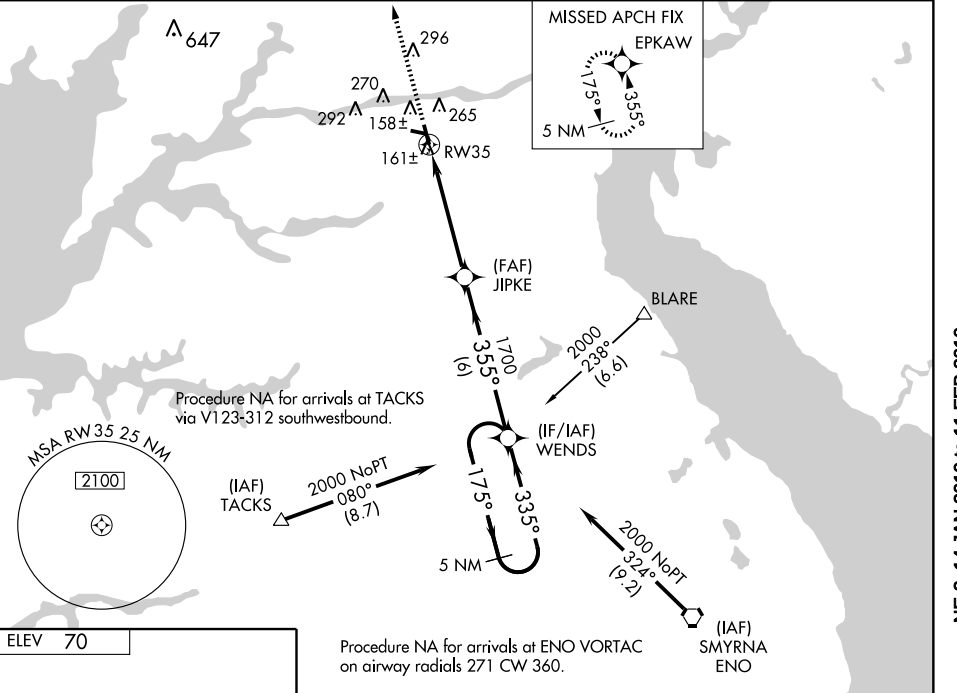
▼

▲

Circling to Rwy 11, 29, 17 NA at night. If local altimeter setting not received, use Wilmington altimeter setting and increase all DAs/MDAs 40 feet. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (119°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Baro-VNAV NA when using Wilmington altimeter setting.

MISSED APPROACH:
Climb to 2000 direct
EPKAW and hold.

AWOS-3 132.325	PHILADELPHIA APP CON 118.35 323.1	CLNC DEL 125.3	UNICOM 122.725 (CTAF)	123.5
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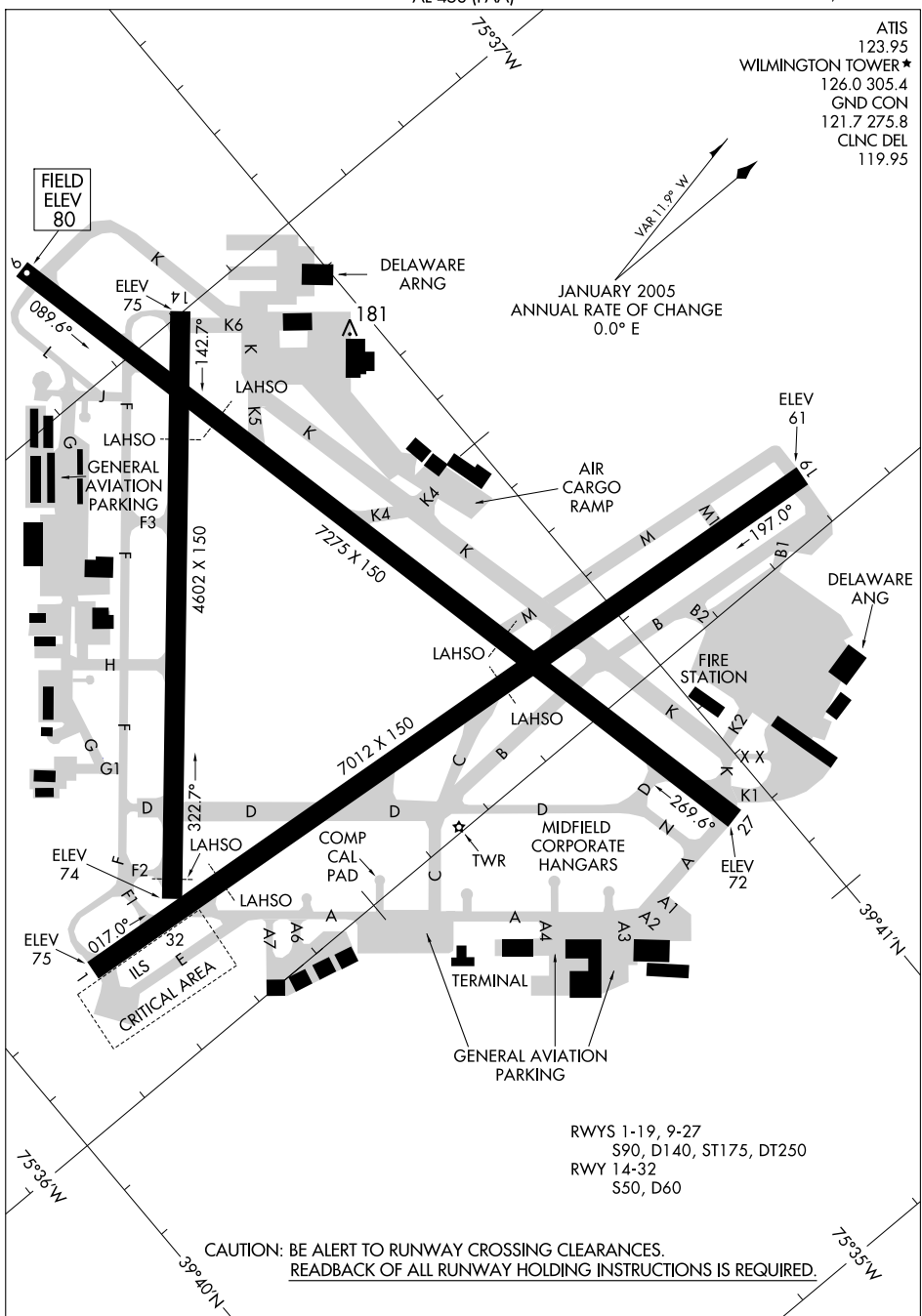
	2000	EPKAW	VGSI and RNAV glidepath not coincident.	5 NM Holding Pattern
			JIPKE	
			RW35	
			355°	175°
			1700	2000
			4.9 NM	6 NM
CATEGORY	A	B	C	D
LPV DA	356-1 286 (300-1)			
LNAV/VNAV DA	421-1¼ 351 (400-1¼)			
LNAV MDA	480-1	410 (500-1)	480-1¼	410 (500-1¼)
CIRCLING	660-1	590 (600-1)	660-1½	660-2
			590 (600-1½)	590 (600-2)

NE-3, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-458 (FAA)

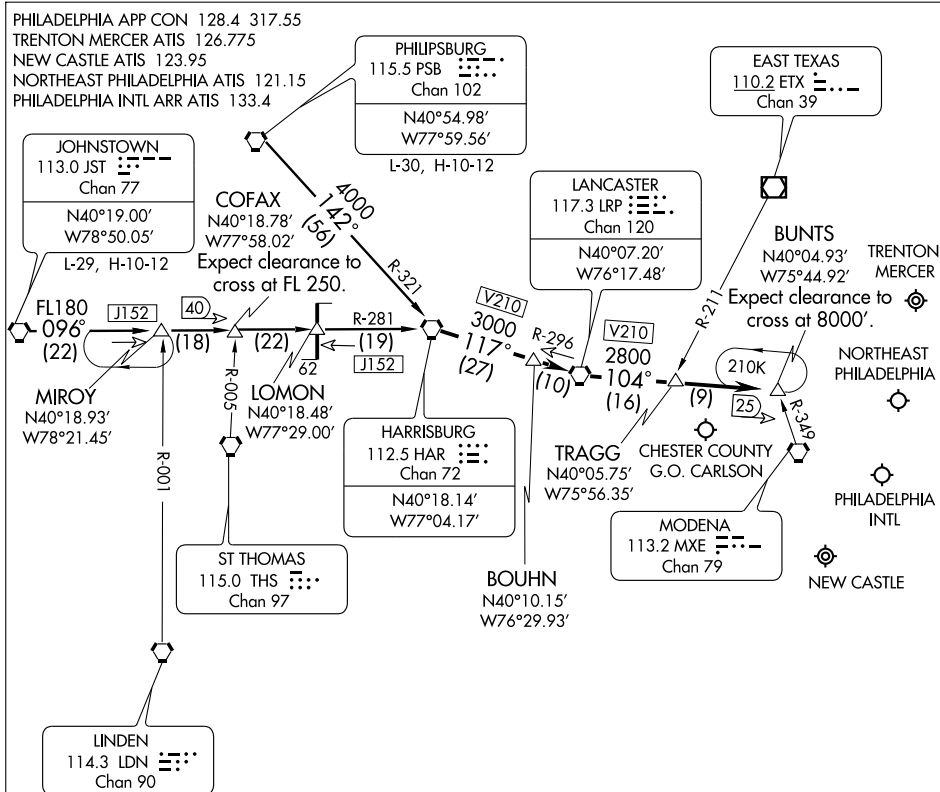
WILMINGTON/ NEW CASTLE (ILG)
WILMINGTON, DELAWARE



NE-3, 14 JAN 2010 to 11 FEB 2010

BUNTS ONE ARRIVAL

PHILADELPHIA, PENNSYLVANIA



NOTE: This STAR is for aircraft capable of 250K IAS or greater.

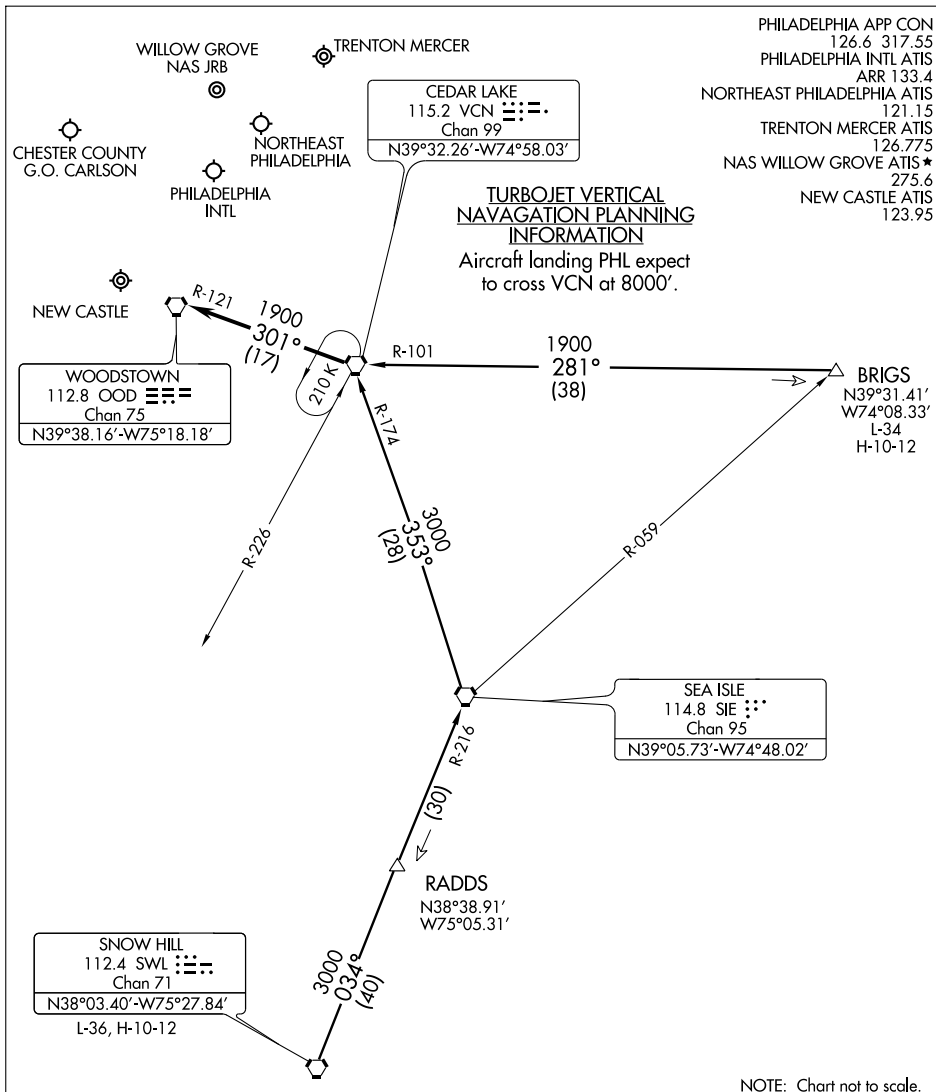
NOTE: Chart not to scale.

JOHNSTOWN TRANSITION (JST.BUNTS1):

PHILIPSBURG TRANSITION (PSB.BUNTS1):

From over HAR VORTAC via HAR R-117 (V210) and LRP R-296 to LRP VORTAC, thence via LRP R-104 (V210) to BUNTS INT. Expect radar vectors to final approach course.

PHILADELPHIA, PENNSYLVANIA



NOTE: Chart not to scale.

R-121 to OOD VORTAC; expect radar vectors to final approach course.

LOC I-ILG 110.3	APP CRS 015°	Rwy Idg 7012 TDZE 76 Apt Elev 80
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ILS or LOC RWY 1

WILMINGTON / NEW CASTLE (ILG)



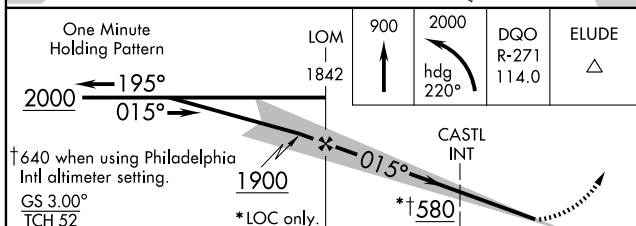
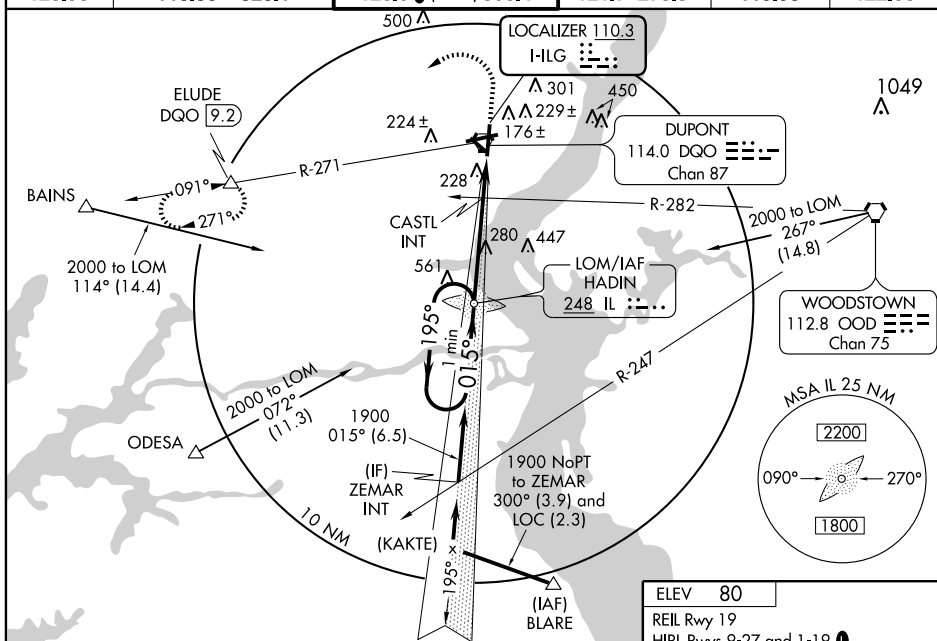
Inoperative table does not apply to S-ILS 1 all Cats. and S-LOC 1 Cats. A and B. Visibility reduction by helicopters NA. When local altimeter setting not received, use Philadelphia Intl altimeter setting: increase DA to 380, all MDA 60 feet, S-LOC 1 Cat. D visibility to RVR 6000; CASTL Fix minimums, increase S-LOC 1 Cat. D visibility ¼ mile. CASTL Fix minimums: inoperative table does not apply to S-LOC 1. DME or ADF REQUIRED.

MALSR

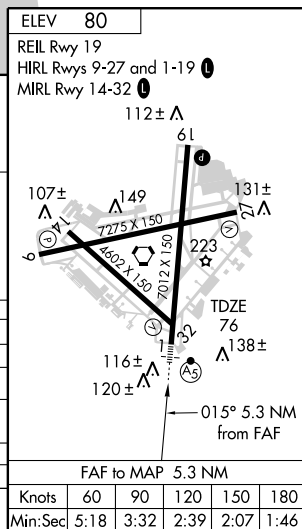


MISSED APPROACH: Climb to 900 then climbing left turn to 2000 via heading 220° and DQO VORTAC R-271 to ELUDE/DQO 9.2 DME and hold (Non-DME aircraft climb to 900, then climbing left turn to 2000 direct HADIN LOM and hold).

ATIS 123.95	PHILADELPHIA APP CON 118.35 323.1	WILMINGTON TOWER* 126.00 (CTAF) 305.4	GND CON 121.7 275.8	CLNC DEL 119.95	UNICOM 122.95
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CATEGORY	A	B	C	D
S-ILS 1		326/50	250 (300-1)	
S-LOC 1		580/50	504 (500-1)	
CIRCLING	580-1	500 (500-1)	600-1½ 520 (600-1½)	640-2 560 (600-2)
CASTL FIX MINIMUMS				
S-LOC 1		400/50	324 (400-1)	
CIRCLING	540-1	460 (500-1)	600-1½ 520 (600-1½)	640-2 560 (600-2)



WAAS
CH **65815**
W01A

APP CRS
015°

Rwy Idg
TDZE
Apt Elev
7012
76
80

RNAV (GPS) RWY 1

WILMINGTON / NEW CASTLE (ILG)

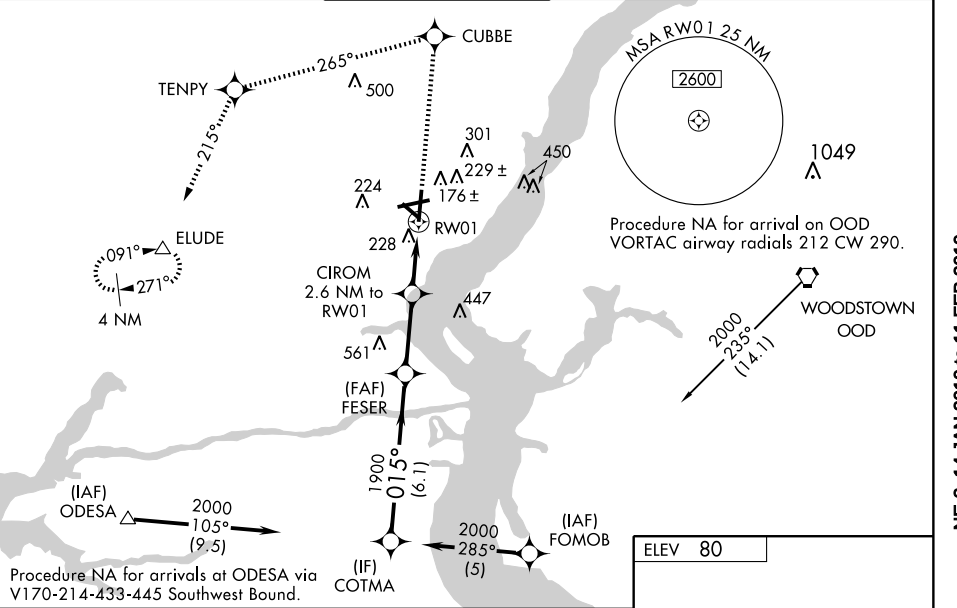
Inoperative table does not apply to LPV all Cats. and LNAV Cats. A and B. Baro-VNAV NA when using Philadelphia Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F).

▼ DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Philadelphia Intl altimeter setting: increase LPV DA to 380, LNAV/VNAV DA to 579, and all MDA 60 ft; increase LNAV/VNAV all Cats. visibility to RVR 6000. For inoperative MALSR, increase LNAV Cats. C and D visibility ¼ mile. For inoperative MALSR, when using Philadelphia Intl altimeter setting, increase LNAV visibility Cat. C ¼ mile.

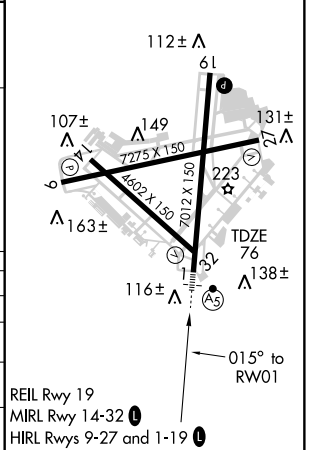
MALSR

MISSED APPROACH:
Climb to 2000 direct CUBBE and left turn via track 265° to TENPY and via track 214° to ELUDE and hold.

ATIS 123.95	PHILADELPHIA APP CON 118.35 323.1	WILMINGTON TOWER * 126.0 (CTAF) 305.4	GND CON 121.7 275.8	CLNC DEL 119.95	UNICOM 122.95
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COTMA				
2000				
Procedure Turn NA				
GS 3.00° TCH 52				
015°				
1900				
*960				
6.1 NM				
2.9 NM				
2.6 NM				
CATEGORY	A	B	C	D
LPV DA	326/50 250 (300-1)			
LNAV/VNAV DA	525/50 449 (500-1)			
LNAV MDA	480/50 404 (400-1)			
CIRCLING	540-1 460 (500-1)		600-1½ 520 (600-1½)	640-2 560 (600-2)



NE-3, 14 JAN 2010 to 11 FEB 2010

WAAS CH 49015 W09A	APP CRS 088°	Rwy Idg TDZE Apt Elev	7275 80 80
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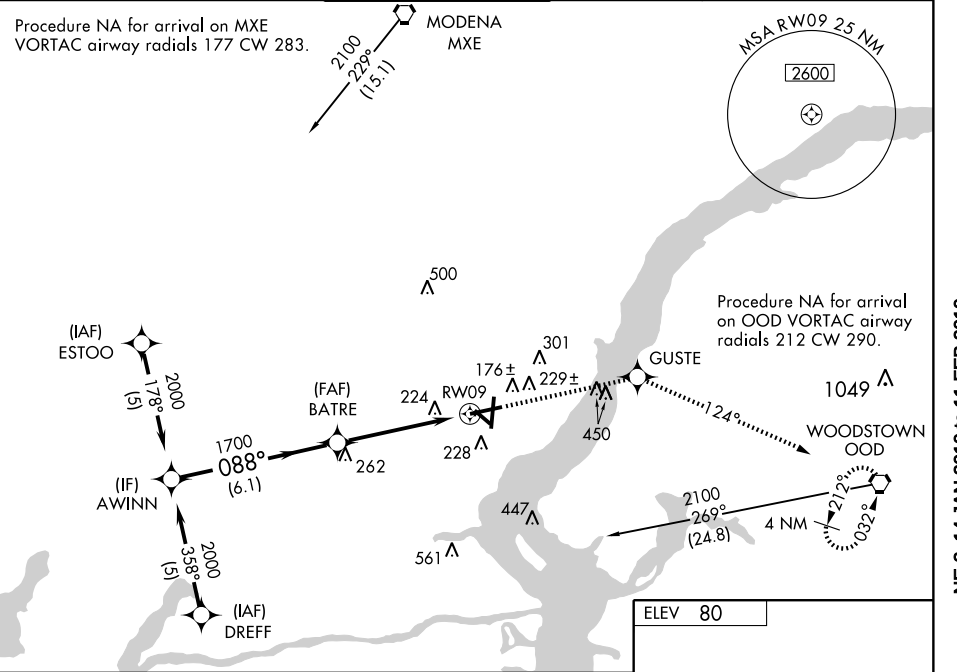
RNAV (GPS) RWY 9

WILMINGTON / NEW CASTLE (ILG)

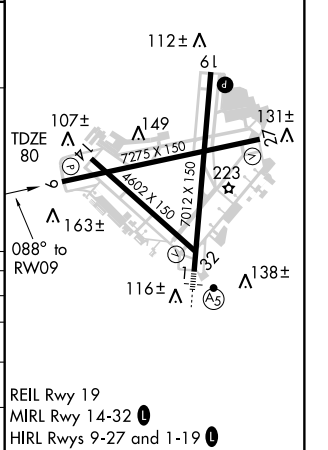
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. VDP and Baro-VNAV NA when using Philadelphia Intl altimeter setting. When local altimeter setting not received, use Philadelphia Intl altimeter setting: increase LPV DA to 448, LNAV/VNAV DA to 568 and all MDA 60 ft; increase LPV all Cats visibility ¼ mile and LNAV/VNAV all Cats visibility ½ mile.

MISSED APPROACH: Climb to 2100 direct GUSTE and via track 124° to OOD VORTAC and hold.

ATIS 123.95	PHILADELPHIA APP CON 118.35 323.1	WILMINGTON TOWER * 126.00 (CTAF) 305.4	GND CON 121.7 275.8	CLNC DEL 119.95	UNICOM 122.95
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Procedure Turn NA GS 3.00° TCH 55	AWINN			
	2000			
CATEGORY	A			
	6.1 NM			
LPV DA	394-1			
	314 (400-1)			
LNAV/ VNAV	433-1¼			
	353 (400-1¼)			
LNAV MDA	520-1			
	440 (500-1)			
CIRCLING	540-1			
	460 (500-1)			



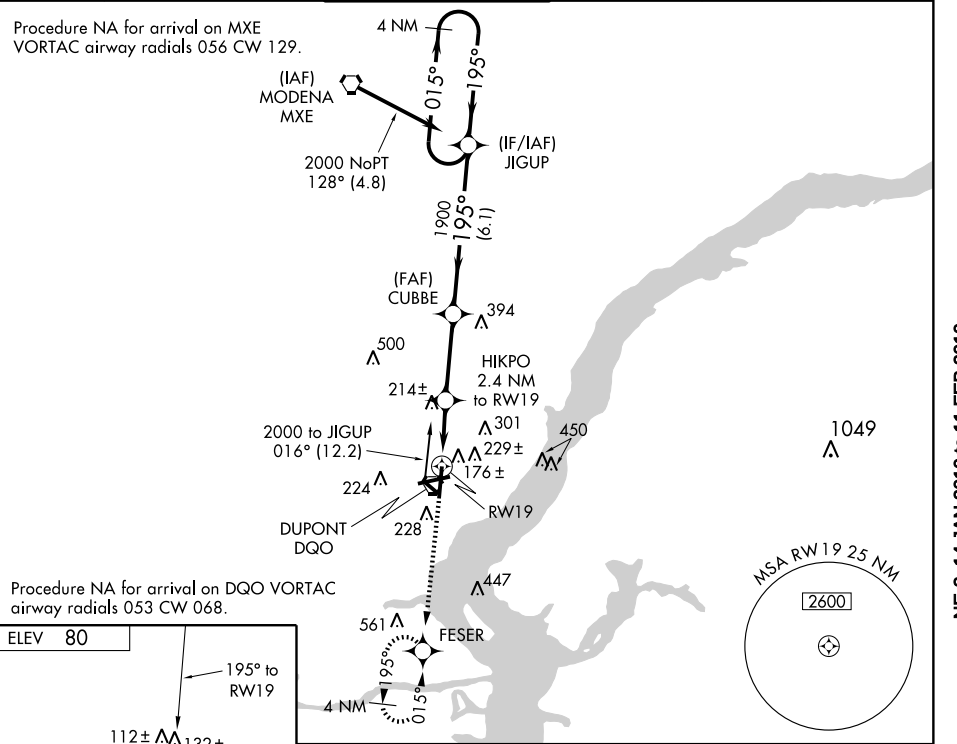
NE-3, 14 JAN 2010 to 11 FEB 2010

Baro-VNAV NA when using Philadelphia Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP-0.3 NA.

Visibility reduction by helicopters NA. When local altimeter setting not received, use Philadelphia Intl altimeter setting: increase LPV DA to 425, LNAV/VNAV DA to 592, and all MDA 60 ft; increase LPV all Cats and LNAV Cat. D visibility ¼ mile.

MISSED APPROACH:
Climb to 2000 direct FESER and hold.

ATIS 123.95	PHILADELPHIA APP CON 118.35 323.1	WILMINGTON TOWER * 126.0 (CTAF) 305.4	GND CON 121.7 275.8	CLNC DEL 119.95	UNICOM 122.95
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ELEV 80	195° to RW19
112±	132±
TDZE 61	TDZE 71
107±	149
131±	223
116±	138±

2000	FESER
↑	✱
* LNAV Only	HIKPO 2.4 NM to RW19
RW19	CUBBE
880*	1900
2.4 NM	3.1 NM
6.1 NM	4 NM Holding Pattern
JIGUP	015°
195°	195°
2000	GS 3.00° TCH 55

CATEGORY	A	B	C	D
LPV DA	371-1 300 (300-1)			
LNAV/VNAV DA	538-1¾ 467 (500-1¾)			
LNAV MDA	480-1	409 (400-1)	480-1¼	409 (400-1¼)
CIRCLING	540-1	460 (500-1)	600-1½	640-2
			520 (600-1½)	560 (600-2)

REIL Rwy 19
MIRL Rwy 14-32
HIRL Rwy 9-27 and 1-19

RNAV (GPS) RWY 27
WILMINGTON / NEW CASTLE (ILG)

MISSED APPROACH: Climb to 2000 direct BATRE and via track 273° to ELUDE and hold.

500
△

229± 301
△ △

(FAF) GUSTE 1800
△ (6.1)

(IF) KAHOE
△

1049
△

(IAF) WOODSTOWN OOD
△

Procedure NA for arrivals at RUUTH via V123-157 Northeast Bound.

2100 255° (18.4)
△

2100 290° (5.6)
△

Procedure NA for arrival on OOD VORTAC airway radials 290 CW 336.

MSA RW27 25 NM
2600
△

ELEV 80

[illegible]

VOR RWY 1
WILMINGTON / NEW CASTLE (ILG)

MALSR

MISSED APPROACH:
Climbing left turn to
2000 via DQO VORTAC
R-274 to GLEEM Int/
DQO 5.1 DME and hold,
continue climb-in-hold to
2000.

[illegible]

ELEV	80
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REIL Rwy 19
HIRL Rwys 9-27
and 1-19 **L**
MIRL Rwy 14-32 **L**

2000
DQO R-274
114.0

GLEEM INT

ANOCE
DQO 2.5

WACON INT
DQO 6

One Minute
Holding Pattern

VORTAC

184° →

← 004°

004°

760°

1.6 NM

2 NM

3.5 NM

≤ 3.23°
TCH 50

* 820 when using Philadelphia
Intl altimeter setting.

CATEGORY	A	B	C	D
S-1	760/50 684 (700-1)		760-1½ 684 (700-1½)	760-1¾ 684 (700-1¾)
CIRCLING	760-1 680 (700-1)		760-2 680 (700-2)	760-2¼ 680 (700-2¼)
ANOCE FIX MINIMUMS				
S-1	480/50 404 (400-1)			
CIRCLING	540-1 460 (500-1)		600-1½ 520 (600-1½)	640-2 560 (600-2)

VORTAC DQO	APP CRS	Rwy Idg
114.0	094°	7275
Chan 87		TDZE 80
		Apt Elev 80

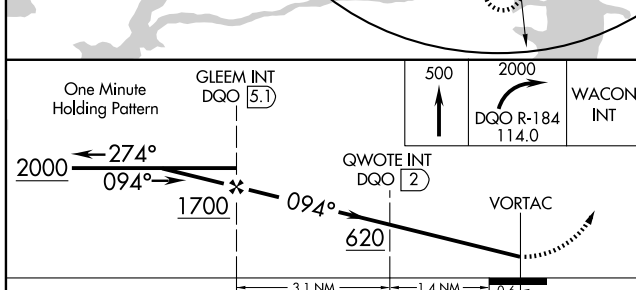
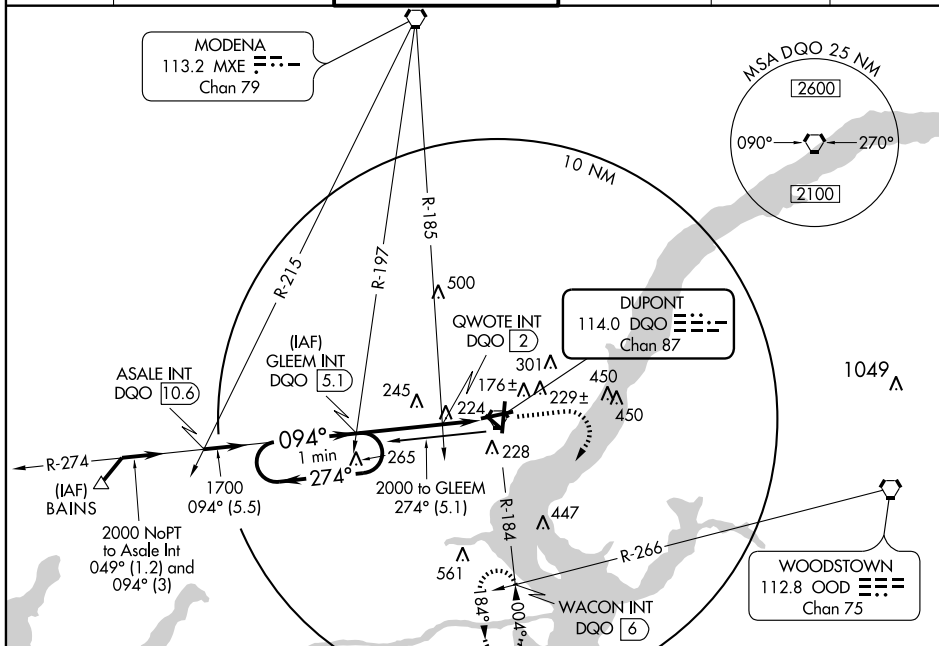
VOR RWY 9

WILMINGTON / NEW CASTLE (ILG)

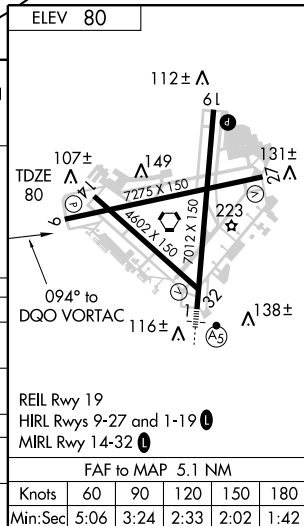
▼ Inoperative table does not apply to ODALS.

MISSED APPROACH: Climb to 500, then climbing right turn to 2000 via DQO R-184 to WACON Int/DQO 6 DME and hold.

ATIS 123.95	PHILADELPHIA APP CON 118.35 323.1	WILMINGTON TOWER ★ 126.00 (CTAF) 305.4	GND CON 121.7 275.8	CLNC DEL 119.95	UNICOM 122.95
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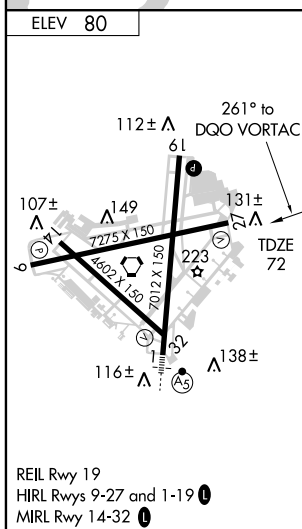
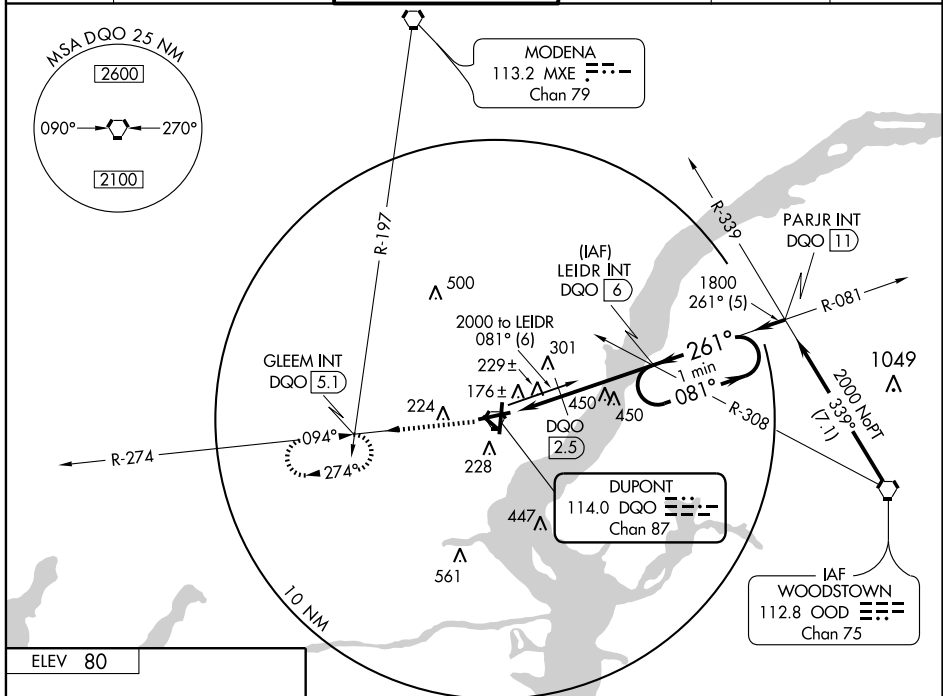


CATEGORY	A	B	C	D
S-9	620-1 540 (600-1)		620-1½ 540 (600-1½)	620-1¾ 540 (600-1¾)
CIRCLING	620-1 540 (600-1)		620-1½ 540 (600-1½)	640-2 560 (600-2)
QWOTE INT MINIMUMS				
S-9	440-1 360 (400-1)			440-1¼ 360 (400-1¼)
CIRCLING	540-1 460 (500-1)		600-1½ 520 (600-1½)	640-2 560 (600-2)



VORTAC DGO 114.0 Chan 87	APP CRS 261°	Rwy Idg 7275 TDZE 72 Apt Elev 80
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 		MISSED APPROACH: Climb to 2000 via DGO VORTAC R-274 to GLEEM Int/DGO 5.1 DME and hold.			
ATIS 123.95	PHILADELPHIA APP CON 118.35 323.1	WILMINGTON TOWER ★ 126.00 (CTAF) 305.4	GND CON 121.7 275.8	CLNC DEL 119.95	UNICOM 122.95



2000 DGO R-274 114.0		LEIDR INT DGO (6)		One Minute Holding Pattern	
GLEEM INT DGO (5.1)		DGO (2.5)		081° → 2000 ← 261° 1800	
VORTAC		0.6 1.9 3.5 NM			
CATEGORY	A	B	C	D	
S-27	800-1 728 (800-1)		800-2 728 (800-2)	800-2 1/4 728 (800-2 1/4)	
CIRCLING	800-1 720 (800-1)		800-2 720 (800-2)	800-2 1/4 720 (800-2 1/4)	
DME MINIMA					
S-27	560-1 488 (500-1)		560-1 1/4 488 (500-1 1/4)	560-1 1/2 488 (500-1 1/2)	
CIRCLING	560-1 480 (500-1)		600-1 1/2 520 (600-1 1/2)	640-2 560 (600-2)	